

Enclosure 8

ICRANet collaboration with Iran

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Introduction

The International Center for Relativistic Astrophysics Network, ICRANet, is an international organization promoting research activities in relativistic astrophysics (see [Agreement on the Establishment and Statute of ICRANet](#)). The Members of ICRANet are Italy, custodian of the Agreement, Armenia, Brazil, the State of Vatican City, Stanford University, the University of Arizona in Tucson, ICRA.

The ICRANet collaboration with Iran was started with accepting Iranian PhD students to come to ICRANet to do their 6 months study opportunity in Italy supported both by ICRANet and the Iran Ministry of Science, Research and technology (MSRT).



From left to right: Prof. Ruffini, Prof. Javad Rahighi (Director of the Iranian Light Source Facility), Prof. Reza Mansori (Sharif University of Technology) and Prof. Vahid Ahmadi (Deputy Minister for Research and Technology) at ICRANet Headquarters - March 12th, 2016.

This collaboration continued with enrolling graduate student in the IRAP PhD program, which is financially supported by ICRANet. On Iranian authorities visiting ICRANet headquarters on March 12th, 2016 see Fig 1 the idea of having official agreement with Iranian universities was decided. Therefore, five agreements were signed with Sharif University of Technology, with Isfahan University of Technology, IASBS, IPM and Shiraz University. Following these productive agreements, the first official ICRANet center was installed at Isfahan University of Technology after Prof. Ruffini visiting the Iranian universities.



From left to right: Prof. Seyed Mohammad Sadegh Movahed, Prof. Reza Mansouri, Prof. Vahid Ahmadi, Prof. Remo Ruffini, Dr. Narek Sahakyan, at Shahid Beheshti University, Tehran, Iran, December 13, 2016.

ICRANet Seat in Iran



Inauguration of the ICRANet center in Iran, Isfahan University of Technology

Prof. **Remo Ruffini**, Director of ICRANet, visited different centers and institutes in Iran: the Isfahan University of Technology on December 10 and 11, 2016, the Institute for Advanced Studies in Basic Sciences (Zanjan) and the Shahid Beheshti University.

Following IUT meeting, the ICRANet Office in the IUT has been inaugurated by Prof. Ruffini and Prof. Modarresh Hashemi during a formal opening ceremony. This center has been launched in order to develop research activities in relativistic astrophysics, organizing workshops and schools, exchanging of researchers, faculty members and graduate students.



From left to right: Dr. Narek Sahakyan (Director of the ICRANet seat in Yerevan), Prof. Remo Ruffini (ICRANet Director) Prof. Mahmood Modarres-Hashemi (President of IUT), Prof Parviz Kameli (Head of IUT physics department and Dr. Moslem Zarei (Deputy of Research of IUT physics Department)



Signing the wall of ICRANet center in IUT by Dr. Narek Sahakyan, Prof. Parviz Kameli and Prof. Ruffini

Prof Remo Ruffini had a meeting with Mahmoud Modarres-Hashemi during his visit at IUT in December 10, 2016 and they discussed about:

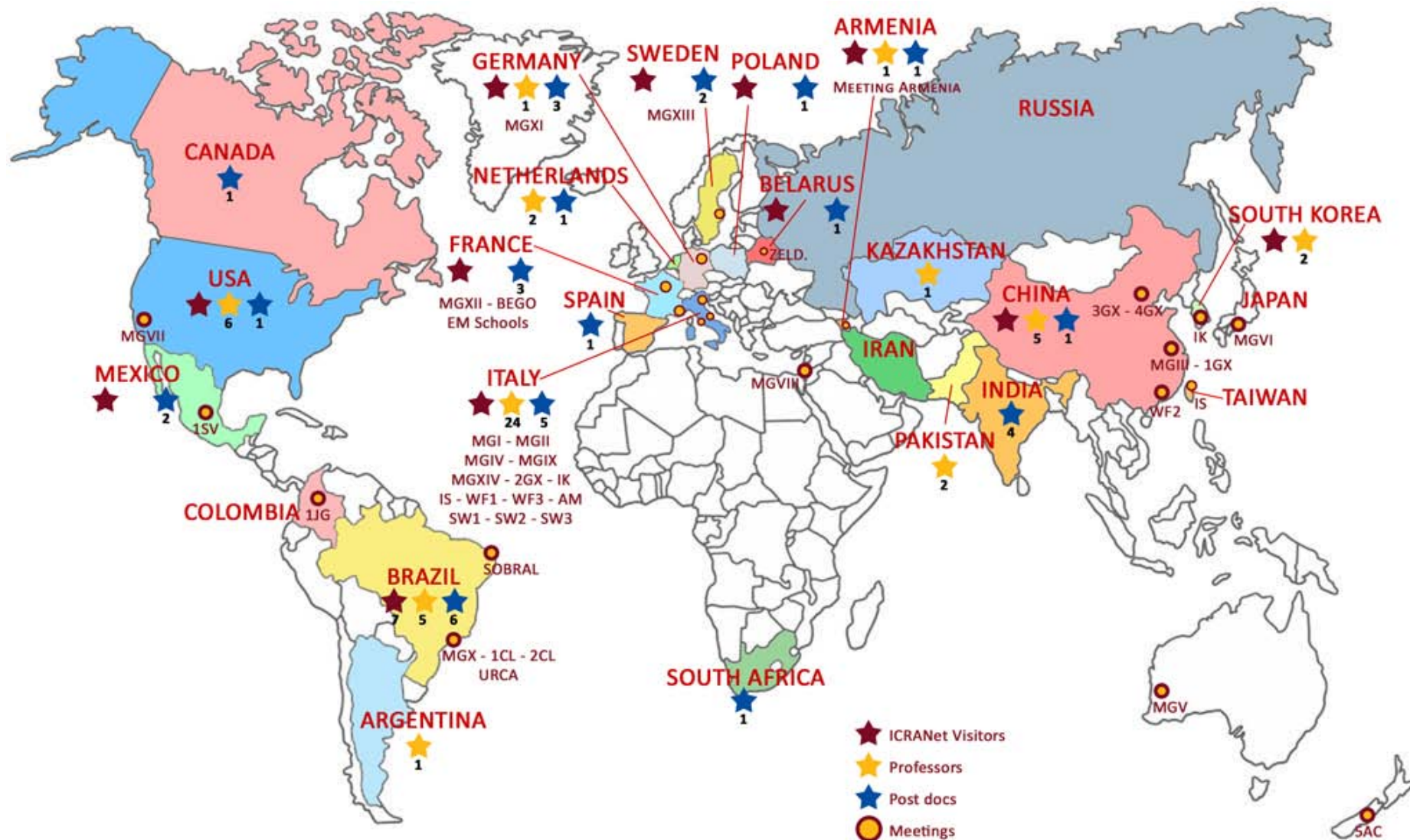
- 1- An active collaboration, developing the participation of IUT to IRAP PhD program of ICRANet as a joint PhD program between IUT-ICRANet under financial support of IRAN-ITALY governments.
- 2- They have in particular agreed that the visit to ICRANet by students and Postdoc in both sides, for the longer period of one year in order to promote a more effective collaboration. IUT look forward to host at least two postdocs per year, one Iranian and one from ICRANet;
- 3- They look forward to an active collaboration and fostering of the ICRANet center in IUT in close contacts with ICRANet Centers in Pescara (headquarters), Rome, Nice, Rio de Janeiro and Yerevan;
- 4- Exchanging of researchers, faculty members and graduate students between Iran-Italy.
- 5- Develop research activities in relativistic astrophysics, organizing workshops and schools.



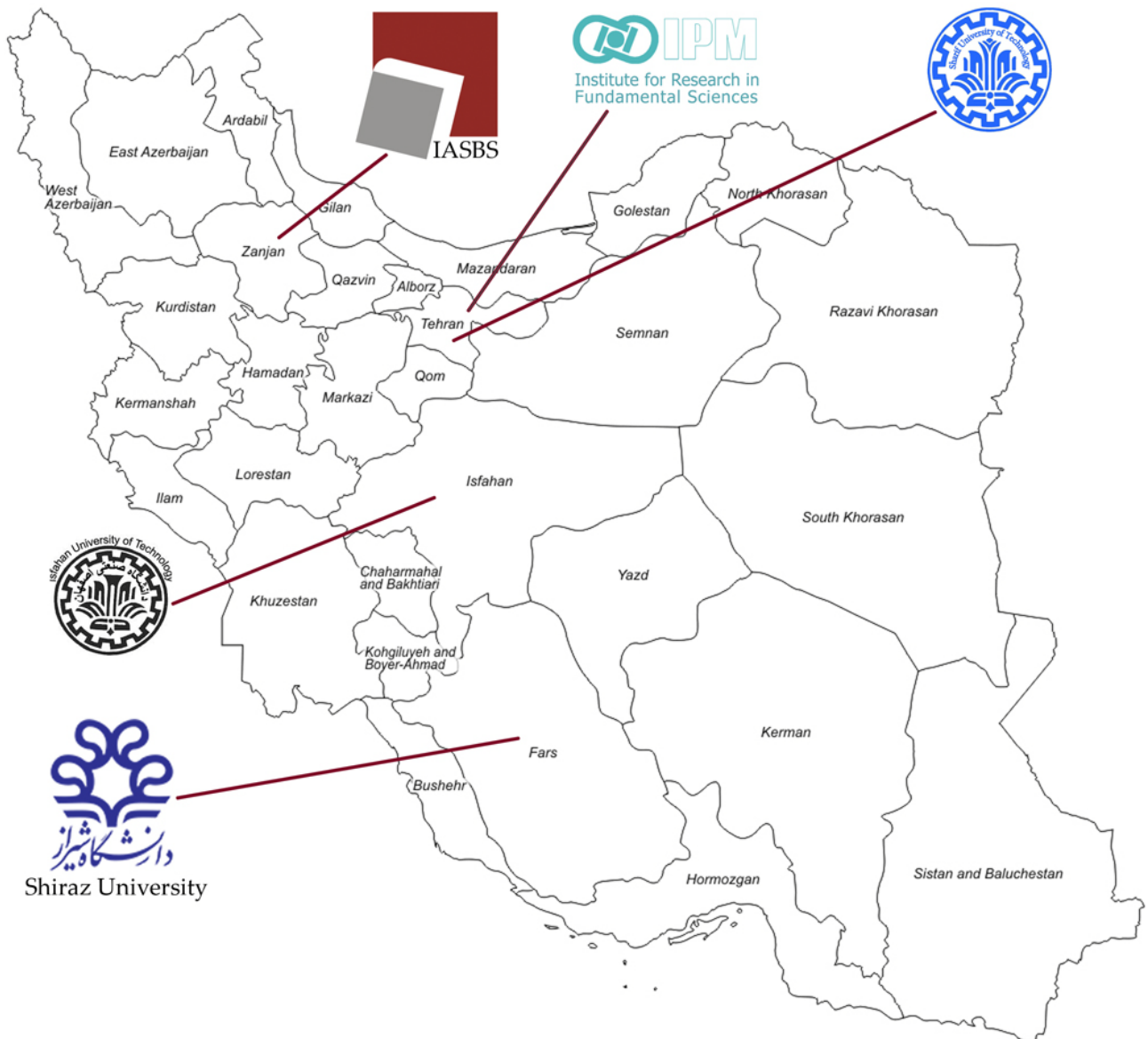
From left to right: Dr. Narek Sahakyan (Director of the ICRANet seat in Yerevan), Prof. Remo Ruffini (ICRANet Director), Prof. Mahmood Modarres-Hashemi (President of IUT), Prof. Mahboobi Sofiani (Director of International & Scientific Cooperation Office of IUT), Dr. Moslem Zarei (Deputy of Research of IUT physics Department and Prof Parviz Kameli (Head of IUT physics department).

*Maps
of collaboration agreements
of ICRA_{Net}*

ICRANet International Collaboration Agreements



ICRANet Agreements with Iranian Institutions



ICRANet signed Agreements with Iranian Institutions

 <p>Shiraz University</p>	<p>➤ ICRANet – Sharif University of Technology Agreement (Persian – English)</p>
 <p>Institute for Advanced Studies in Basic Sciences Gava Zang, Zanjan, Iran</p>	<p>➤ ICRANet – IASBS Agreement</p>
	<p>➤ ICRANet – Sharif University of Technology Agreement</p>
 <p>Institute for Research in Fundamental Sciences</p>	<p>➤ ICRANet – IPM Agreement</p>
	<p>➤ ICRANet – Isfahan University of Technology Agreement</p>





یادداشت تفاهم‌نامه همکاری‌های آموزشی، پژوهشی و فناوری

بین

دانشگاه شیراز، ایران

و

مرکز بین‌المللی شبکه اخترفیزیک نسبیتی

(ICRANet)

با توجه به اهمیت همکاری‌های آموزشی، تحقیقاتی و فناوری میان دانشگاه‌ها و مراکز پژوهشی برای مشارکت فعال استادان و محققان در زمینه علم و فناوری، مرکز ICRANet به نمایندگی مدیر مرکز، پروفیسور Remo Ruffini و دانشگاه شیراز به نمایندگی پروفیسور مجید ارشاد لنگرودی، در این تفاهم‌نامه همکاری درمورد بندهای زیر به تفاهم رسیده‌اند:

اول:

اهداف عمده این تفاهم‌نامه همکاری ترویج توسعه و انتشار پژوهش‌های فنی و علمی در زمینه‌های کیهان‌شناسی، گرانش و اخترفیزیک نسبیتی بین ICRANet و مؤسسات تحت هماهنگی دانشگاه شیراز است.

بنابراین، در این سند برای تعیین مؤسساتی که در این تفاهم‌نامه همکاری شرکت می‌کنند به ICRANet – دانشگاه شیراز مراجعه می‌کنیم.

دوم:

فعالیت‌هایی که براساس این تفاهم‌نامه همکاری انجام می‌شوند از کارهای مشترکی تشکیل می‌شوند که یک یا چند مورد از موارد زیر را دربرگیرد:

۱. تبادل دانشجویان کارشناسی ارشد و دکتری، پژوهشگران و اعضای هیئت علمی ICRANet و دانشگاه شیراز؛
۲. توسعه فعالیت‌های آموزشی و پژوهشی مرتبط با حوزه‌های تخصصی و مورد توجه ICRANet و دانشگاه شیراز؛
۳. برگزاری سمینارها، همایش‌ها و کنفرانس‌ها و دوره‌های کوتاه مدت در حوزه‌های تخصصی و مورد توجه ICRANet و دانشگاه شیراز؛
۴. ترویج و حمایت از رویدادهای فنی-علمی و فرهنگی و فعالیت‌هایی که برای عموم آزاد باشد؛
۵. ایجاد فرصت برای آموزش مدرسان و پژوهشگران، با استفاده از آموزش‌های سطح بالا در حوزه‌های تخصصی و مورد توجه ICRANet و دانشگاه شیراز؛
۶. تشکیل دوره‌ها و فعالیت‌های آموزشی و بازیابی و همچنین توسعه پژوهش‌های بین‌مؤسسه‌ای در حوزه‌های مرتبط با برنامه‌های تحصیلات تکمیلی هر مؤسسه؛
۷. افزایش انتشارات مشترک؛
۸. اجرای فعالیت‌های جامعه‌محور از طریق توسعه علمی؛
۹. تبادل اطلاعات آموزشی و پژوهشی در هر دو مؤسسه امضاکننده این تفاهم‌نامه همکاری.

سوم:

اجرای فعالیت‌های پیش‌بینی شده توسط طرفین قرارداد با استفاده از برنامه کار این تفاهم‌نامه مشخص می‌شود، طرفین قرارداد پس از تعیین پروژه‌های مشترک در حوزه‌های پژوهش و آموزش، یا سایر فعالیت‌هایی با منافع مشترک آن را امضاء می‌کنند.

چهارم:

مؤسسات امضاکننده این تفاهم‌نامه می‌بایست، به‌عنوان یک اصل کلی، و در محدوده امکانات بودجه‌ای خود، فعالیت‌های علمی انجام شده را از نظر مالی تأمین کنند. در مورد تبادلات حرفه‌ای بین مؤسسات امضاکننده، مؤسسه مهمان باید هزینه حمل و نقل دانشجویان، استادان و متخصصین خود را پوشش دهد، در حالیکه هزینه سکونت زندگی بر عهده مؤسسه میزبان خواهد بود. برای تأمین مالی این هزینه‌ها، شرکت‌کنندگان باید به نمایندگی‌های مالی و سایر مؤسسات ملی و بین‌المللی درخواست دهند.

مؤسسه مهمان باید دانشجویان، استادان، پژوهشگران و کارمندانی که در فعالیت‌های تبادلی نقش دارند را در طول دوره فعالیت، بیمه سلامت کنند.

پنجم:

هنگامی که نتیجه فعالیت‌های نشأت گرفته از این تفاهم‌نامه محصول، پیشرفت یا خلاقیتی باشد، از نظر حقوقی، طرفین شرایط مربوط به حق مالکیت را طبق قانون و قوانین نظارتی مناسب، با استفاده از ابزار خاص و متناسب با سهم هر مؤسسه تنظیم می‌کنند.

ششم:

فعالیت‌های توسعه یافته در این تفاهم‌نامه همکاری توسط اعضای هر دو طرف قرارداد انجام می‌شود؛ هر مؤسسه این اعضاء را بر اساس ماهیت فعالیت‌ها در هر پروژه انتخاب می‌کند. طرفین می‌توانند از حمایت سازمان‌های خارج از مؤسسه نیز استفاده کنند.

از طرف هر مؤسسه‌ای، یک هماهنگ‌کننده تعیین می‌شود تا بر اجرایی شدن و پیشروی برنامه‌ها و پروژه‌های مرتبط با این تفاهم‌نامه نظارت کند و برای همکاری‌های آینده برنامه‌ریزی کند.

هماهنگ‌کننده‌ها لااقل سالی یک بار با هم ملاقات داشته باشد، یا از طریق الکترونیکی (مثلاً کنفرانس الکترونیکی) یا بازدید از مؤسسه همکار با هم در ارتباط باشند.

هفتم:

این سند از تاریخ امضاء، به مدت ۵ (پنج) سال معتبر خواهد بود. پس از آن به صورت خودکار به مدت ۵ (پنج) سال از طریق مکاتبه بین طرفین قرارداد تمدید خواهد شد.

هشتم:

این تفاهم‌نامه همکاری ممکن است توسط هر یک از طرفین لغو شود، منوط به اینکه دست‌کم ۶۰ (شصت) روز قبل از تاریخ فسخ اطلاع‌رسانی شود. اگر ترجیحاً طرفین به تفاهم رضایت‌بخش رسیدند این اطلاع‌رسانی در نظر گرفته نمی‌شود. البته در صورت لغو قرارداد فعالیت‌های در حال اجرا به کار خود ادامه می‌دهند.

نهم:

هر اصلاحیه ضروری برای این تفاهم‌نامه همکاری باید بدون غرض‌ورزی و تبعیض در مورد فعالیت‌های در حال اجرا، در بندهایی که مابین طرفین قابل مذاکره خواهد بود، افزوده شود.

به طور خاص، این سند همکاری می‌تواند برای سایر همکاری‌های طرفین با افزودن بندهایی به کار برده شود.

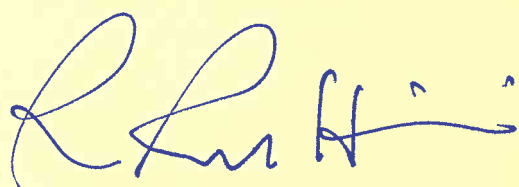
دهم:

برای اهداف این تفاهم نامه همکاری، طرفین نشانی خود اینگونه اعلام می کنند:

ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 Pescara, Italy

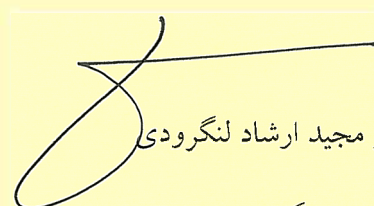
دانشگاه شیراز: شیراز، بلوار جمهوری اسلامی، ساختمان مرکزی دانشگاه شیراز، طبقه چهارم، دفتر روابط بین الملل
از طریق این نشانی ها مکاتبه میان طرفین به منظور تفسیر و اجرایی شدن این تفاهم نامه همکاری صورت می گیرد.

در مورد بندهای توافق شده، نمایندگان طرفین توافق نامه فوق را در چهار نسخه - دو نسخه به زبان فارسی و دو نسخه به زبان انگلیسی - امضا نموده اند که همگی از محتویات یکسان و اعتبار قانونی برابر برخوردارند.



پروفسور REMO RUFFINI

مدیر ICRANet



پروفسور مجید ارشاد لنگرودی

رئیس دانشگاه شیراز

March 21, 2016







GENERAL MEMORANDUM OF UNDERSTANDING

On

EDUCATIONAL, RESEARCH AND TECHNOLOGICAL COLLABORATION

between the

SHIRAZ UNIVERSITY

and the

INTERNATIONAL CENTER FOR RELATIVISTIC ASTROPHYSICS NETWORK

Recognizing the importance of academic, research and technological collaboration between universities and research centers and active engagement of academic members and researchers in the domain of science and technology, The ICRANet, represented by its Director, Prof. Dr. Remo Ruffini, and the Shiraz University, represented by its Chancellor, Prof. Dr. Majeed Ershad – Langroodi,

agree

to establish this MoU which is governed by the following clauses:

FIRST:

The main objectives of this MoU are to promote the development and dissemination of scientific and technological research in the fields of cosmology, gravitation and relativistic astrophysics between ICRANet and several institutions under the coordination of the Shiraz University.

Henceforth, we will refer in this document to ICRANet – Shiraz University to designate the institutions which participate in this present MoU.

SECOND:

The activities to be undertaken under this MoU will consist of joint actions involving one or more of the following items:

I _ The institutional exchange of graduate or post-graduate students, researchers and faculty members of ICRANet and Shiraz University;

II _ The development of teaching and/or research activities related to the areas of expertise and interest of ICRANet and Shiraz University;

III _ The organization of symposia, seminars, conferences and short courses on topics and areas of expertise and interest of ICRANet and Shiraz University;

IV _ The promotion and support of technical-scientific and cultural events and activities open to the public;

V _ The development of opportunities to promote university teachers and researchers, by means of specialized advanced high-level courses in areas of interest and expertise of ICRANet and Shiraz University;

VI _ The organization of training and recycling courses and activities as well as developing inter-institutional research areas associated to local graduate programs;

VII _ The promotion of joint publications;

VIII _ Implementation of socially oriented activities through the academic extension;

IX _ Exchange of information concerning teaching and research activities in both institutions signatory of this MoU.

THIRD:

The implementation of the activities envisaged by the contracting parties will be specified by means of Work Plans relative to this MoU, to be signed by the contracting parties at the time of definition of common projects, areas of research and education, or any other activities of mutual interest.

FOURTH:

The institutions signatories of this MoU shall adopt, as a general principle, and to the extent of their budgetary possibilities, the financing of academic actions carried out by this instrument. In the specific case of exchange of professional between the signatory institutions, the visiting

institution shall endeavor efforts to cover transportation expenses of their students, professors and technicians while the hosting institution may cover their living expenses. To finance such expenses, participants must apply to granting agencies and other national or international institutions.

Students, professors, researchers and administrative staff taking part in exchange activities must have health insurance valid during those activities paid by the visiting part.

FIFTH:

When activities originating from this instrument of cooperation result in products, improvements or innovations, subject to rights, both parties will establish – according to the law and to proper regulatory legislation, by means of specific instruments and proportionally to the contribution of each institution – the conditions that will regulate property rights.

SIXTH:

The activities developed within the scope of this MoU will be carried by members of both parties, appointed by each institution, according to the nature of the activities in each project, the parties being allowed to rely upon the support of external organizations.

An overall coordinator will be appointed for each of the signing Institutions in order to monitor and supervise the implementation and progress of programs and projects related to the present MoU and to establish plans for the future of this collaboration.

The coordinators will meet at least once a year or by electronic means (such as e-conference), or through visits to partner institutions.

SEVENTH:

This present instrument will be valid for 5 (five) years, starting from the date of its signature. It will be extended automatically for another 5 (five) years through an exchange of letters between the signatories.

EIGHTH:

This present MoU may be canceled by either of the parties, by means of a notification at least 60 (sixty) days in advance _ which may be waived if both parties come to a consensual _ being advisable, however, to attempt to ensure that ongoing activities are maintained.

NINTH:

Any necessary modification to the present MoU must be stated in Additional Terms that will be negotiated between the parties, without prejudice to ongoing activities.

In particular this instrument of cooperation could be extended to other partnerships, through the express agreement of the parties through an Additional Term.

TENTH:

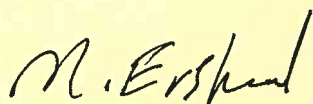
For purposes of this MoU the parties establish their addresses as:

ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 pescara, Italy;

Shiraz University: Central Administration Bldg., Jomhoori Eslami Blvd., Shiraz 71946-84471, Iran.

Through which the correspondence held between with respect to the interpretation and enforcement of this MoU should be formalized.

All terms having agreed upon, the representatives of the parties signed the present instrument, in 4 (four) copies of the same document, two in Iranian and two in English, with equal content to ensure the legal effect.



PROF. DR. MAJEED ERSHAD-LANGROODI
Chancellor of Shiraz University



PROF. DR. REMO RUFFINI
Director of ICRANet



March 21, 2016





Institute for Advanced Studies
in Basic Sciences
Gava Zang, Zanjan, Iran

COOPERATION PROTOCOL

between the

**INTERNATIONAL CENTER FOR RELATIVISTIC ASTROPHYSICS NETWORK
(ICRANet)**

and the

**INSTITUTE FOR ADVANCED STUDIES IN BASIC SCIENCES
(IASBS)**

The ICRANet, represented by its Director, Prof. Remo Ruffini, and the Institute for Advanced Studies in Basic Sciences, represented by its President, Prof. Hamid Reza Khalesifard,

agree

to establish this Cooperation Protocol which is governed by the following clauses:

FIRST:

The main objectives of this Cooperation Protocol are to promote the development and dissemination of scientific and technological research in the fields of cosmology, gravitation and relativistic astrophysics between ICRANet and several institutions under the coordination of the Institute for Advanced Studies in Basic Sciences.

Henceforth we will refer in this document to ICRANet - IASBS to designate the institutions which participate in this present Cooperation Protocol.

SECOND:

The activities to be undertaken under this Cooperation Protocol will consist of joint actions involving one or more of the following items:

I – The institutional exchange of graduate or post-graduate students, researchers and faculty members of ICRANet and IASBS;

II – The development of teaching and/or research activities related to the areas of expertise and interest of ICRANet and IASBS;

III – The organization of symposia, seminars, conferences and short courses on topics and areas of expertise and interest of ICRANet and IASBS;

IV – The promotion and support of technical-scientific and cultural events and activities open to the public;

V – The development of opportunities to form university teachers and researchers, by means of specialized advanced high-level courses in areas of interest and expertise of ICRANet and IASBS;

VI –The organization of training and recycling courses and activities as well as the developing of inter-institutional research areas associated to local graduate programs;

VII –The promotion of joint publications;

VIII – Implementation of socially oriented activities through the academic extension;

IX – Exchange of information concerning teaching and research activities in both institutions signatory of this Cooperation Protocol.

THIRD:

The implementation of the activities envisaged by the contracting parties will be specified by means of Work Plans relative to this Cooperation Protocol, to be signed by the contracting parties at the time of definition of common projects, areas of research and education, or any other activities of mutual interest.

FOURTH:

The institutions signatories of this Cooperation Protocol shall adopt, as a general principle, and to the extent of their budgetary possibilities, the financing of academic actions carried out by this instrument. In the specific case of exchange of professional between the signatory institutions, the visiting institution shall endeavor efforts to cover transportation expenses of their students, professors and technicians while the hosting institution may cover their living expenses. To finance such expenses, participants must apply to granting agencies and other national or international institutions.

Students, professors, researchers and administrative staff taking part in exchange activities must have health insurance valid during those activities paid by the visiting part.

FIFTH:

When activities originating from this instrument of cooperation result in products, improvements or innovations, subject to rights, both parties will establish - according to the law and to proper regulatory legislation, by means of specific instruments and proportionally to the contribution of each institution - the conditions that will regulate property rights.

SIXTH:

The activities developed within the scope of this Cooperation Protocol will be carried by members of both parties, appointed by each institution, according to the nature of the activities in each project, the parties being allowed to rely upon the support of external organizations.

An overall coordinator will be appointed for each of the signing Institutions in order to monitor and supervise the implementation and progress of programs and projects related to the present Cooperation Protocol and to establish plans for the future of this cooperation.

The coordinators will meet at least once a year or by electronic means (such as e-conference), or through visits to partner institutions.

SEVENTH:

This present instrument will be valid for 5 (five) years, starting from the date of its signature. It will be extended automatically for another 5 (five) years through an exchange of letters between the signatories.

EIGHTH:

This present Cooperation Protocol may be canceled by either of the parties, by means of a notification at least 60 (sixty) days in advance – which may be waived if both parties come to a consensual agreement – being advisable, however, to attempt to ensure that ongoing activities are maintained.

NINTH:

Any necessary modification to the present Cooperation Protocol must be stated in Additional Terms that will be negotiated between the parties, without prejudice to ongoing activities.

In particular this instrument of cooperation could be extended to other partnerships, through the express agreement of the parties through an Additional Term.

TENTH:

For purposes of this Cooperation Protocol the parties establish their addresses as:

ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 Pescara, Italy;

IASBS: Institute for Advanced Studies in Basic Sciences, Prof. Yousef Sobouti Blvd. 444, 4513766731 Zanzan, Iran;

through which the correspondence held between with respect to the interpretation and enforcement of this Cooperation Protocol should be formalized.

All terms having been agreed upon, the representatives of the parties signed the present instrument, in 4 (four) copies of the same document in English, with equal content to ensure legal effect.

April 09 2016



PROF. HAMID REZA KHALEIFARD

President of Institute for Advanced
Studies in Basic Sciences



PROF. DR. REMO RUFFINI

Director of ICRANet



COOPERATION PROTOCOL
between the
**INTERNATIONAL CENTER FOR RELATIVISTIC ASTROPHYSICS NETWORK
(ICRANet)**
and the
SHARIF UNIVERSITY OF TECHNOLOGY

The ICRANet, represented by its DiPresident, Prof. Remo Ruffini, and the Sharif University Of Technology, represented by its President, Mahmoud Fotouhi Firoozabad,

agree

to establish this Cooperation Protocol which is governed by the following clauses:

FIRST:

The main objectives of this Cooperation Protocol are to promote the development and dissemination of scientific and technological research in the fields of cosmology, gravitation and relativistic astrophysics between ICRANet and several institutions under the coordination of the Sharif University Of Technology.

Henceforth we will refer in this document to ICRANet- Sharif University Of Technology to designate the institutions which participate in this present Cooperation Protocol.

SECOND:

The activities to be undertaken under this Cooperation Protocol will consist of joint actions involving one or more of the following items:

- I – The institutional exchange of graduate or post-graduate students, researchers and faculty members of ICRANet and Sharif University Of Technology;
- II – The development of teaching and/or research activities related to the areas of expertise and interest of ICRANet and Sharif University Of Technology;
- III – The organization of symposia, seminars, conferences and short courses on topics and areas of expertise and interest of ICRANet and Sharif University Of Technology;
- IV – The promotion and support of technical-scientific and cultural events and activities open to the public;
- V – The development of opportunities to form university teachers and researchers, by means of specialized advanced high-level courses in areas of interest and expertise of ICRANet and Sharif University Of Technology;
- VI –The organization of training and recycling courses and activities as well as the developing of inter-institutional research areas associated to local graduate programs;
- VII –The promotion of joint publications;
- VIII – Implementation of socially oriented activities through the academic extension;
- IX – Exchange of information concerning teaching and research activities in both institutions signatory of this Cooperation Protocol.

THIRD:

The implementation of the activities envisaged by the contracting parties will be specified by means of Work Plans relative to this Cooperation Protocol, to be signed by the contracting parties at the time of definition of common projects, areas of research and education, or any other activities of mutual interest.

FOURTH:

The institutions signatories of this Cooperation Protocol shall adopt, as a general principle, and to the extent of their budgetary possibilities, the financing of academic actions carried out by this instrument. In the specific case of exchange of professional between the signatory institutions, the visiting institution shall endeavor efforts to cover transportation expenses of their students, professors and technicians while the hosting institution may cover their living expenses. To finance such expenses, participants must apply to granting agencies and other national or international institutions.

Students, professors, researchers and administrative staff taking part in exchange activities must have health insurance valid during those activities paid by the visiting part.

FIFTH:

When activities originating from this instrument of cooperation result in products, improvements or innovations, subject to rights, both parties will establish - according to the law and to proper regulatory legislation, by means of specific instruments and proportionally to the contribution of each institution - the conditions that will regulate property rights.

SIXTH:

The activities developed within the scope of this Cooperation Protocol will be carried by members of both parties, appointed by each institution, according to the nature of the activities in each project, the parties being allowed to rely upon the support of external organizations.

An overall coordinator will be appointed for each of the signing Institutions in order to monitor and supervise the implementation and progress of programs and projects related to the present Cooperation Protocol and to establish plans for the future of this cooperation.

The coordinators will meet at least once a year or by electronic means (such as e-conference), or through visits to partner institutions.

SEVENTH:

This present instrument will be valid for 5 (five) years, starting from the date of its signature. It will be extended automatically for another 5 (five) years through an exchange of letters between the signatories.

EIGHTH:

This present Cooperation Protocol may be canceled by either of the parties, by means of a notification at least 60 (sixty) days in advance – which may be waived if both parties come to a consensual agreement – being advisable, however, to attempt to ensure that ongoing activities are maintained.

NINTH:

Any necessary modification to the present Cooperation Protocol must be stated in Additional Terms that will be negotiated between the parties, without prejudice to ongoing activities.

In particular this instrument of cooperation could be extended to other partnerships, through the express agreement of the parties through an Additional Term.

TENTH:

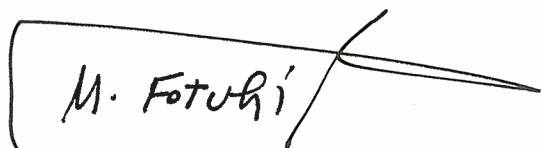
For purposes of this Cooperation Protocol the parties establish their addresses as:

ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 Pescara, Italy;

Sharif University Of Technology: _____, through which the correspondence held between with respect to the interpretation and enforcement of this Cooperation Protocol should be formalized.

All terms having been agreed upon, the representatives of the parties signed the present instrument, in 4 (four) copies of the same document, two in Iranian and two in English, with equal content to ensure legal effect.

_____, MARCH 12, 2016



PROF. MAHMOUD FOTUHI FIROOZABAD

President of Sharif University Of
Technology



PROF. DR. REMO RUFFINI

Director of ICRANet



COOPERATION PROTOCOL

between the

**INTERNATIONAL CENTER FOR RELATIVISTIC ASTROPHYSICS NETWORK
(ICRANet)**

and the

**INSTITUTE FOR RESEARCH IN FUNDAMENTAL SCIENCES
(IPM)**

The ICRANet, represented by its Director, Prof. Remo Ruffini, and the Institute for Research in Fundamental Sciences (IPM), represented by its Director, Mohammad Javad A. Larijani,

agree



to establish this Cooperation Protocol which is governed by the following clauses:

FIRST:

The main objectives of this Cooperation Protocol are to promote the development and dissemination of scientific and technological research in the fields of cosmology, gravitation and relativistic astrophysics between ICRANet and several institutions under the coordination of the Institute for Research in Fundamental Sciences (IPM).

Henceforth we will refer in this document to ICRANet - IPM to designate the institutions which participate in this present Cooperation Protocol.

SECOND:

The activities to be undertaken under this Cooperation Protocol will consist of joint actions involving one or more of the following items:

- I – The institutional exchange of graduate or post-graduate students, researchers and faculty members of ICRANet and IPM;
- II – The development of teaching and/or research activities related to the areas of expertise and interest of ICRANet and IPM;
- III – The organization of symposia, seminars, conferences and short courses on topics and areas of expertise and interest of ICRANet and IPM;
- IV – The promotion and support of technical-scientific and cultural events and activities open to the public;
- V – The development of opportunities to form university teachers and researchers, by means of specialized advanced high-level courses in areas of interest and expertise of ICRANet and IPM;
- VI –The organization of training and recycling courses and activities as well as the developing of inter-institutional research areas associated to local graduate programs;
- VII –The promotion of joint publications;
- VIII – Implementation of socially oriented activities through the academic extension;
- IX – Exchange of information concerning teaching and research activities in both institutions signatory of this Cooperation Protocol.

THIRD:

The implementation of the activities envisaged by the contracting parties will be specified by means of Work Plans relative to this Cooperation Protocol, to be signed by the contracting parties at the time of definition of common projects, areas of research and education, or any other activities of mutual interest.

FOURTH:

The institutions signatories of this Cooperation Protocol shall adopt, as a general principle, and to the extent of their budgetary possibilities, the financing of academic actions carried out by this instrument. In the specific case of exchange of professional between the signatory institutions, the visiting institution shall endeavor efforts to cover transportation expenses of their students, professors and technicians while the hosting institution may cover their living expenses. To finance such expenses, participants must apply to granting agencies and other national or international institutions.

Students, professors, researchers and administrative staff taking part in exchange activities must have health insurance valid during those activities paid by the visiting part.

FIFTH:

When activities originating from this instrument of cooperation result in products, improvements or innovations, subject to rights, both parties will establish - according to the law and to proper regulatory legislation, by means of specific instruments and proportionally to the contribution of each institution - the conditions that will regulate property rights.

SIXTH:

The activities developed within the scope of this Cooperation Protocol will be carried by members of both parties, appointed by each institution, according to the nature of the activities in each project, the parties being allowed to rely upon the support of external organizations.

An overall coordinator will be appointed for each of the signing Institutions in order to monitor and supervise the implementation and progress of programs and projects related to the present Cooperation Protocol and to establish plans for the future of this cooperation.

The coordinators will meet at least once a year or by electronic means (such as e-conference), or through visits to partner institutions.

SEVENTH:

This present instrument will be valid for 5 (five) years, starting from the date of its signature. It will be extended automatically for another 5 (five) years through an exchange of letters between the signatories.

EIGHTH:

This present Cooperation Protocol may be canceled by either of the parties, by means of a notification at least 60 (sixty) days in advance – which may be waived if both parties come to a consensual agreement – being advisable, however, to attempt to ensure that ongoing activities are maintained.

NINTH:

Any necessary modification to the present Cooperation Protocol must be stated in Additional Terms that will be negotiated between the parties, without prejudice to ongoing activities.

In particular this instrument of cooperation could be extended to other partnerships, through the express agreement of the parties through an Additional Term.

TENTH:

For purposes of this Cooperation Protocol the parties establish their addresses as:

ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 Pescara, Italy;

IPM: Tehran, Niavaran Building, Bahonar Sq., Iran;

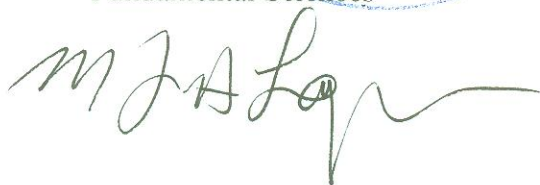
through which the correspondence held between with respect to the interpretation and enforcement of this Cooperation Protocol should be formalized.

All terms having been agreed upon, the representatives of the parties signed the present instrument, in 2 (two) copies of the same document in English.

May 3, 2016



PROF. MOHAMMAD JAVAD A. LARIJANI

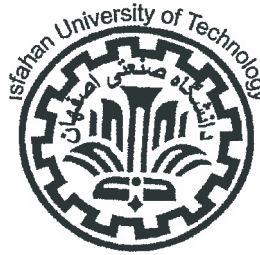
Director of Institute for Research in
Fundamental Sciences



PROF. DR. REMO RUFFINI

Director of ICRANet





COOPERATION PROTOCOL

between the

**INTERNATIONAL CENTER FOR RELATIVISTIC ASTROPHYSICS NETWORK
(ICRANet)**

and the

**ISFAHAN UNIVERSITY OF TECHNOLOGY
(IUT)**

The ICRANet, represented by its Director, Prof. Remo Ruffini, and the Isfahan University of Technology, represented by its President, Mahmoud Modarres-Hashemi,

agree

to establish this Cooperation Protocol which is governed by the following clauses:

FIRST:

The main objectives of this Cooperation Protocol are to promote the development and dissemination of scientific and technological research in the fields of cosmology, gravitation and relativistic astrophysics between ICRANet and several institutions under the coordination of the Isfahan University of Technology.

Henceforth we will refer in this document to ICRANet – IUT to designate the institutions which participate in this present Cooperation Protocol.

SECOND:

The activities to be undertaken under this Cooperation Protocol will consist of joint actions involving one or more of the following items:

I – The institutional exchange of graduate or post-graduate students, researchers and faculty members of ICRANet and IUT;

II – The development of teaching and/or research activities related to the areas of expertise and interest of ICRANet and IUT;

III – The organization of symposia, seminars, conferences and short courses on topics and areas of expertise and interest of ICRANet and IUT;

IV – The promotion and support of technical-scientific and cultural events and activities open to the public;

V – The development of opportunities to form university teachers and researchers, by means of specialized advanced high-level courses in areas of interest and expertise of ICRANet and IUT;

VI – The organization of training and recycling courses and activities as well as the developing of inter-institutional research areas associated to local graduate programs;

VII – The promotion of joint publications;

VIII – Implementation of socially oriented activities through the academic extension;

IX – Exchange of information concerning teaching and research activities in both institutions signatory of this Cooperation Protocol.

THIRD:

The implementation of the activities envisaged by the contracting parties will be specified by means of Work Plans relative to this Cooperation Protocol, to be signed by the contracting parties at the time of definition of common projects, areas of research and education, or any other activities of mutual interest.

FOURTH:

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Students, professors, researchers and administrative staff taking part in exchange activities must have health insurance valid during those activities paid by the visiting part.

FIFTH:

When activities originating from this instrument of cooperation result in products, improvements or innovations, subject to rights, both parties will establish - according to the law and to proper regulatory legislation, by means of specific instruments and proportionally to the contribution of each institution - the conditions that will regulate property rights.

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TENTH:

For purposes of this Cooperation Protocol the parties establish their addresses as:
ICRANet: ICRANet Coordinating Center: Piazza della Repubblica, 10, 65122 Pescara, Italy;

IUT: Isfahan, Khomeyni Shahr, Daneshgah e Sanati HW, Iran;

through which the correspondence held between with respect to the interpretation and enforcement of this Cooperation Protocol should be formalized.

All terms having been agreed upon, the representatives of the parties signed the present instrument, in 4 (four) copies of the same document, two in Iranian and two in English, with equal content to ensure legal effect.

February 21, 2016

M. Modarres Hash
PROF. MAHMOUD MODARRES-HASHEMI
President of Isfahan University of
Technology

*R. Ruffini*
PROF. DR. REMO RUFFINI
Director of ICRANet


ICRANet

*Scientific and teaching activities
of ICRA^{Net}
with Iranian Institutions*

Shiraz University

The Shiraz University, located in historical city of Shiraz, is both a modern as well as old institution of Higher Education in Iran. Established in 1946, the University has, since then, applied itself to the advancement of knowledge no less than to its dissemination.

Shiraz University is one of the major universities of Iran and has always ranked as Top 5 among Iranian universities and is well respected in Iran.



Shiraz University has pioneered the establishment of doctoral programs in Iran. Presently the university has over 19,000 students, with 200 Bachelor's degree programs (B.A., B.Sc.), 300 Master's degree programs (M.A., M.Sc.), one professional degree program (Doctor of Veterinary Medicine), and 150 Ph.D. programs.

As a top Iranian University, Shiraz University is research-oriented and has about 700 faculty members and 19000 students. The University offers BA/BS in 80 departments, MA/MS in 188 and Ph.D. in 129 areas of concentration. At present Shiraz University consists of 14 colleges.

According to a report by the Ministry of Science, Research and Technology (Iran), Shiraz University ranked top 10 respectively between 64 and 68 non-medical universities and institutions in Iran.



Shiraz University
Shiraz, Iran

Agreement ICRANet - Shiraz University
English - Persian

Chancellor
Prof. Dr. Majed Ershad-Langroodi

Signatory
Prof. Dr. Majed Ershad-Langroodi

Institute for Advanced Studies in Basic Sciences

IASBS

The Institute for Advanced Studies in Basic Sciences (IASBS) is an advanced research center and graduate-level degree-granting institution located in Zanjan, Iran. It was founded in 1991 by Prof. Yousef Sobouti. Prof. Yousef Sobouti, is the former student and collaborator of Subrahmanyan Chandrasekhar (Nobel Laureate in Physics) has continued academic activity reaching prominence in relativistic astrophysics recognized worldwide, and has been through many years in contact with Prof. Remo Ruffini.

IASBS offers advanced degrees (Masters and above) in Mathematics, Physics, Geophysics, Biophysics and Chemistry. As of 2008, the mathematics department offers Master of Science degrees in Computer Science with



concentration on Artificial Intelligence (esp. Multi Agent Systems and Computational Geometry) and Graph & Algorithms. The Institute has two undergraduate programs in Information Technology, one of which is a joint program with Heriot-Watt University of the United Kingdom. The latter, lectured and examined in English language, involves passing modules in both universities at the same time and each student is registered both at IASBS and Heriot- Watt University (i.e. successful students receive a degree from each university).



Prof. Ruffini's Conference at IASB; December 12, 2016

IASBS




**Institute for Advanced Studies in Basic Sciences
Zanzan, Iran**

Agreement ICRANet - IASBS

Director
Prof. Hamid Reza Khalesifard

Signatory
Prof. Hamid Reza Khalesifard

Contact person
Prof. Yousef Sobouti 
Founder of IASBS

ONGOING AND PREVIOUS ACTIVITIES



Prof. Yousef Sobouti

Founder of the Institute for Advanced Studies in Basic Sciences (IASBS)
ICRANet Adjunct Professor of the Faculty

Graduate students from IASBS enrolled in the IRAP PhD

Zeinab Khorrami

IRAP PhD - Erasmus Mundus - Third Cycle, 2012-2015
Current Position: Researcher at Cardiff University

Visiting Professors to IASBS



Prof. Remo Ruffini - ICRANet Director

Conference: Binary driven Hypernovae and the moment of formation of a Black Hole
December 12, 2016



Dr. Narek Sahakyan - Director of the ICRANet seat in Yerevan

December 12, 2016

Sharif University of Technology

SUT

Sharif University of Technology is one of the largest engineering schools in the Islamic Republic of Iran, known traditionally to be first choice of top ranked Iranian high school and university students in engineering and physical sciences. It was established in 1966 under the name of Aryarmehr University of Technology and, at that time. In 1980, the university was renamed Sharif University of Technology. SUT now has a total of 300 full-time faculty members, approximately 430 part-time faculty members and a student body of about 12,000. Sharif University is responsible for building Sharif-Sat satellite which is an Iranian small experimental satellite. At present SUT consists of 15 departments.

The university is known for its large number of alumni who join the academic world. For example, Maryam Mirzakhani, Professor of Mathematics in Stanford University and the first female winner of Fields Medal.

Academic Ranking of World Universities
2015: 401-500

Times Higher Education 2015-2016: 401-500
U.S. News
2016: 435

<http://www.sharif.ir/web/en>





**Sharif University of Technology
Teheran, Iran**

Agreement ICRANet - Sharif University

President

Prof. Mahmoud Fotouhi Firoozabad

Signatory

Prof. Mahmoud Fotouhi Firoozabad

Contact person

Prof. Reza Mansouri 

ONGOING AND PREVIOUS ACTIVITIES

Graduate students from Sharif University enrolled in the IRAP PhD Program



Rahim Moradi

IRAP PhD - Thirteenth Cycle, 2014-2017

Visiting Professors from Sharif University



Prof. Reza Mansouri 

Visiting Professor at ICRANet

From 18 to 23 of July 2015

From 12 to 13 of March 2016

Participation in the:

· *MG14*, 12-18 July 2015

· *14th Italian-Korean Symposium on Relativistic Astrophysics*, 20-24 July 2015

Visiting Professors to Sharif University



Prof. Remo Ruffini - ICRANet Director 

Conference: From Supernovae, to Hypernovae to Binary Driven Hypernovae

December 13, 2016



Dr. Narek Sahakyan - Director of the ICRANet seat in Yerevan 

December 13, 2016

Institute for Research in Fundamental Sciences

IPM

The Institute for Research in Fundamental Sciences (IPM) affiliated with the Ministry of Science, Research, and Technology, was founded in 1989 under the name of Institute for Studies in Theoretical Physics and Mathematics (from which it has retained its present acronym).

Looking at more than two decades of IPM's experience, three features stand out: First, the quantity and quality of the research that has been carried out as evidenced by the number of the articles published in accredited journals and the number of references to these article; dynamic style of management in the sense that the researcher has a pivotal significance in all decisions that are made, the research units act independently; there is a great deal of flexibility in the creation and dissolution of these units. IPM intends to be of service to the totality of research in Iran thus it has regularly cooperated with the Iranian universities

and other research centers by facilitating their access to IPM's resources; in fact IPM



was the pioneering institute who brought Internet to Iran and in 1992 created a framework for linking the universities across the country to each other and to the rest of the world (Iranet). The Institute continues its pioneering role with such national projects as the National Iranian Observatory and the Iranian Light Source Facility.

The pillars of the Institute are its Board of Governors, the Director of the Institute, and the Institute's Scientific Council. Mohammad-Javad Larijani has been the director of the Institute since its inception. At present the Institute is comprised of nine schools: School of Astronomy, School of Biological Sciences, School of Cognitive Sciences, School of Computer Science, school of Mathematics, School of Nano Science, School of Particles and Accelerators, School of Philosophy, School of Physics.



**Institute for Research in Fundamental Sciences
Teheran, Iran
Agreement ICRANet - IPM**

Director
Prof. Mohammad Javad A. Larijani

Signatory
Prof. Mohammad Javad A. Larijani

ONGOING AND PREVIOUS ACTIVITIES

Visiting Professors from IPM



Prof. Javad Rahighi

Director of the Iranian Light Source Facility (ILSF)
Chair of Training Advisory Committee at the Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME)
Visiting Professor at ICRANet
From 12 to 13 of March 2016

Isfahan University of Technology

IUT

Isfahan University of Technology is a state university under the supervision of the Ministry of Science, Research, and Technology. IUT began its academic activities in 1977 with around 800 students in five departments; the enrollment has grown to 10000 in twelve departments.



Naqsh-e Jahan Square(Imam Square)-Isfahan-IRAN

Many of the country's brightest talents choose IUT among their first choices in National University Entrance Exams. The university offers degrees in B.S., M.Sc., and PhD levels, in branches of Science and Engineering.

Times Higher Education

2014-2015: National rank: 2, International rank: 351-400

U.S.News

2016: National rank 3, International rank: 547

<http://www.iut.ac.ir/en/>




Isfahan University of Technology
Isfahan, Iran

Agreement ICRANet - IUT

President
Prof. Mahmoud Modarres-Hashemi

Signatory
Prof. Mahmoud Modarres-Hashemi

Contact person
Prof. Mansour Haghighat 

ONGOING AND PREVIOUS ACTIVITIES

Visiting students from IUT

Miriam Amiri
Visiting student at ICRANet
From January to September 2017 (expected)



Saghar Batebi
Visiting student at ICRANet
From 19 of November 2014 to 19 of May 2015



Ehsan Bavarsad
Visiting student at ICRANet
From 9 of February to 9 of March 2011



Rohollah Mohammadi
Visiting student at ICRANet
From 3 of March to August 2010




Iman Motie
Visiting student at ICRANet
From 1 of October 2010 to 28 of February 2011



Rashid Riahi 
Visiting student at ICRANet
From 24 of August 2016 to 8 of February 2017



Soroush Shakeri 
Visiting student at ICRANet
From 19 of January 2016 to 4 of January 2017
Participation in the:
· MG14, 12-18 July 2015
· 4th Bego Rencontre, EMJD School,, 30 May - 3 June 2016
· Adriatic Meeting, 20-30 June 2016



Seddigheh Tizchang
Visiting student at ICRANet
From 19 of November 2014 to 19 of May 2015

Visiting Professors from IUT



Prof. Mansour Haghghat 📄

Visiting Professor at ICRANet

From 18 to 26 of July 2015

Participation in the:

- *MG14*, 12-18 July 2015
- *14th Italian-Korean Symposium on Relativistic Astrophysics*, 20-24 July 2015

Visiting Professors to IUT



Prof. Remo Ruffini - ICRANet Director 📄

From 10 to 11 of December 2016

Conference: From Supernovae, to Hypernovae to Binary Driven Hypernovae

December 11, 2016 - [Announcement](#)



Dr. Narek Sahakyan - Director of the ICRANet seat in Yerevan 📄

From 10 to 11 of December 2016

Conference: Exploring the universe with gamma-rays and neutrinos

December 11, 2016 - [Announcement](#)

