



"The Metal-Rich Universe"

12-16 June, 2006
Los Cancajos, La Palma, Canary Islands, Spain

Second Announcement (February)

The conference is organized by the [Instituto de Astrofísica de Canarias \(IAC\)](http://www.ing.iac.es) and will be held from 12-16 June, 2006 at Hotel H10 Taburiente Playa, Los Cancajos, La Palma, Canary Islands, Spain. See La Palma maps: <http://www.ing.iac.es/PR/lapalma/lpmap.jpg> and http://www.lapalmabiosfera.com/biosfera_esp/mapa_isla/

SCIENTIFIC RATIONALE

The metal-rich Universe can shed new lights on very topical subjects, extending and complementing our knowledge of the physical processes that are more commonly studied at solar and low metallicities. Among those processes and problems we may cite the following ones:

- What is the highest [Fe/H] attained?
- What are the abundance trends and dispersions of abundance ratios in the metal-rich Galactic bulge and thin disk?
- What is the nature of Super Metal Rich (SMR) stars and what do they imply about early Galactic chemical evolution (age-metallicity relation)? What do they teach about metallicity-dependent nucleosynthesis yields? How does the observed Galactic radial metallicity gradient in the disk constrain the radial flow origin of SMR stars?
- What is the effect of high metallicity on star formation? Does the initial mass function vary at high metallicities?
- It is now well established that stars rich in metals are more likely to harbor planets. Does this mean that there is a minimum metallicity for planets to form around stars?
- What is the effect of high metallicity on stellar evolution? One can expect that the most massive stars lose more mass through radiatively driven stellar winds. How does it affect stellar rotation, stellar parameters and evolutionary tracks?
- What are the consequences on the stellar populations expected and on the chemical enrichment of the interstellar medium?
- As the number of extrasolar planets has grown - more than 140 stars are now known to have planets, this has triggered careful and detailed abundance studies of more and more metal-rich stars. Trends of the abundances of many elements at high metallicity are now available and wait for an interpretation in terms of stellar nucleosynthesis and chemical evolution models. Are the observed trends in agreement with the predictions of current stellar and chemical evolution models?
- Is the center of the Galaxy metal rich? The good adequacy of the models in the high metallicity regime is of great interest for the study of the central regions of galaxies, some thought to have higher than solar metallicity. The question of the metallicity of the central region of our own galaxy and its stellar content will be addressed in this context. Also it appears that many quasar environments are metal-rich out to redshifts of at least 5. Low-resolution, integrated-light, spectra of giant elliptical galaxies imply a mean metallicity of some objects equal to, or greater than, the most metal-rich stars in the Galaxy. Is this real, and if so, how can it have occurred? A

better knowledge of star formation and evolution in high metallicity regions appear thus as a key element to progress in these areas of research.

Whereas several conferences on metal poor stars have been organized in the last few years, none on metal rich stars has been held in spite of recent progresses in the field. In this conference the different aspects related to the above issues will be addressed. More specifically, the latest observations of metal rich stars (in the field, clusters, bulge, planet hosts etc.) will be presented. On the theoretical side, models atmospheres and spectral line formation, models of star formation and stellar evolution nucleosynthesis at high $[Fe/H]$ will be discussed and uncertainties examined.

MAIN TOPICS

- Abundances in Galactic Bulge and Disk.
- Metal rich clusters, HII regions.
- Stars with exoplanets, metallicity and planet formation.
- Age-metallicity relation, Star Formation and IMF Variations.
- Metal rich hot stars and their winds.
- Stellar evolution and yields at $[Fe/H] \geq 0$: Massive stars, supernovae and AGBs.
- Chemical evolution at $[Fe/H] \geq 0$, abundances in ISM.
- Extragalactic objects: Starbursts, Elliptical galaxies.

MEETING SCHEDULE AND FORMAT

Scientific sessions will take place from Monday, June 12th, through Friday, June 16th, with a maximum of 150 participants. The format of the conference will be organized with a total of 8 sessions of 4 hours each. Invited Reviews of 30 minutes including discussion and Contributed Talks of 20 minutes. Poster presentations will be exposed during the whole meeting.

INVITED SPEAKERS:

- | | |
|---|---|
| I. Bonnell (St Andrews, UK) | R. Maiolino (Univ. Arcetri, Italy) |
| F. Bresolin (IfA, USA) | F. Matteucci (Oss. Trieste, Italy) |
| L. Carigi (UNAM, Mexico) | G. Meynet (Geneva Obs., Switzerland) |
| P. Crowther (Univ. Sheffield, UK) | F. Najarro (IEM, Spain) |
| M. Edmunds (Univ. Cardiff, UK) | M. Pettini (IoA, U Cambridge, UK) |
| S. Feltzing (Lund Obs, Sweden) | J. Puls (USM, Germany) |
| C. Frohlich (Univ. Basel, Switzerland) | S. Randich (Oss. Arcetri, Italy) |
| J. Fulbright (Johns Hopkins Univ., USA) | M. Rich (UCLA, USA) |
| R. Gilmozzi (ESO, Germany) | J.M. Rodríguez-Espinosa (IAC, Spain) |
| P. Jablonka (Geneva Obs., Switzerland) | N. Santos (Univ. Lisboa, Portugal) |
| P. Kroupa (Univ. Bonn, Germany) | Y. Takeda (NAOJ, Japan) |
| D. Kunth (IAP, France) | S. Trager (Kapteyn, The Netherlands) |
| D. Lennon (ING, Spain) | S. Vauclair (Obs. Midi-Pyrenees, France) |
| R. Laing (ESO, Germany) | S.C. Yoon (Sterrekunding Inst. Anton Pannekoek) |
| D. Lin (Lick Obs., USA) | |

SCIENTIFIC ORGANIZING COMMITTEE (SOC)

Garik Israelian (Chair)	IAC, Spain
Sofia Feltzing	Lund, Sweden
Don Garnett	Univ. Arizona, USA
Gerry Gilmore	Univ. Cambridge, UK
Artemio Herrero	IAC, Spain
David Lambert	Univ. Texas, USA
Georges Meynet (Co-Chair)	Geneva Obs., Switzerland
Francesca Matteucci	Univ. Trieste, Italy
Andrew McWilliam	Carnegie Observatory, USA
Sofia Randich	INAF, Arcetri, Italy
Nuno Santos	Obs. Lisboa, Portugal
Yoichi Takeda	NAOJ, Japan

LOCAL ORGANIZING COMMITTEE (LOC, IAC)

Garik Israelian (Chair)
Judith de Araoz
Eva Bejarano
Alexandra Ecuillon
Jonay González Hernández
Artemio Herrero
Tanja Karthaus

IMPORTANT DATES

15 th March, 2006	• Deadline for Early Registration Fee Payment by Credit Card (200 €)
20 th April, 2006	• Deadline for submission of final titles and abstracts in Latex format. No later submissions will be considered.
28 th April, 2006	• Decision about Financial Support
1 st May, 2006	• Deadline for Conference Registrations
5 th May, 2006	• Deadline for Hotel Booking
19 th May, 2006	• Deadline for Late Registration Fee Payment by Credit Card (230 €)
31 st May, 2006	• Final Announcement
12-16 th June, 2006	• On site Registration Fee (250 €)
31 st July, 2006	• Deadline for submission of papers for the Proceedings and Copyright Forms

REGISTRATION FEE

To register for the conference you have to use the [Registration Form](#).

Early Registration (until March 15 th , 2006)	200 Euros
Late Registration (until May 19 th , 2006)	230 Euros
On site registration	250 Euros

The fee should be paid by credit card –only VISA or MASTER card are accepted–, and will be charged the day after the deadline or in cash at the Registration Desk upon arrival (**NO** bank transfers or checks are accepted). The fee will cover welcome cocktail, coffee breaks, conference bag, conference poster, abstract booklet and social events.

For payment of Registration Fee, please print the [Credit Card Payment Form](#), fill in all the applicable fields with capital letters, and submit it **ONLY** by fax to the LOC (Fax: +34 922 605 210).

The receipt for your registration fee and a copy of the amount charged to your credit card will be attached to the badge that you will get at the Registration Desk, upon your arrival.

CONFERENCE VENUE AND FACILITIES

The conference will take place at the conference centre of the Hotel H10 Taburiente Playa, where the participants are accommodated. This hotel has full facilities for conference users including:

- A large conference hall.
- A small computing centre with high-speed links. This will be provided by the IAC for the conference and will be available during conference hours only.
- Ample poster area for poster exhibitions. Individual panels (1m x 1m) will be provided.
- Overhead and multimedia projectors, and computer display facilities for your laptop.
- Coffee-breaks will be held outside the conference hall.

FINANCIAL SUPPORT

Those participants who applied for Financial Support will be informed individually by the LOC about the awarded grants on **Friday, 28th April, 2006**.

VISA APPLICATIONS

Spain has agreement for visa exception with many countries, such as: Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Israel, Japan, Mexico, New Zealand, Norway, San Marino, Switzerland, Uruguay, USA, Venezuela. Citizens from these countries as well as EU citizens **do not** need a visa to enter and stay in Spain up to 90 days.

Citizens from all other countries **do need a tourist visa** to enter in Spain. This kind of visa provides coverage for attending scientific conferences, seminars, or meetings.

In order to request a tourist visa, you have to contact the **Spanish Embassy/Consulate** nearest to your city. http://www.spanish-living.com/info_embassies.htm

This must be done several months before the conference is set to take place, since visa applications can take quite some time.

Letter of invitation

We will provide a letter of invitation for those participants who request one. If you need such a letter, please send to us an e-mail (mru@iac.es) with the following information:

- 1) Full name, passport number and country of issue.
- 2) Full mailing address and a fax number to send the letter.
- 3) Names and passport numbers of your accompanying persons, if any.
- 4) Arrival and departure dates (in accordance to your flight reservations).

Please, be sure to provide your name and the names of your accompanying persons exactly as written in the passports.

ABSTRACT SUBMISSION

All participants who wish to present a contribution to this Conference are kindly requested to submit an abstract of their talk(s)/poster(s) in Latex format before **April, 20th, 2006**. You will be informed by May, 15th whether it will be oral or poster in accordance with the decision of the SOC. [Abstract Submission Form](#)

There will be a sufficient number of panels available in a room adjacent to the conference hall for display of posters during the whole duration of the Conference.

PROCEEDINGS

The proceedings of the Conference will be published as a volume of the Cambridge University Press (CUP). Further details will be given in the Final Announcement.

HOTEL INFORMATION

Hotel bookings will be made through the LOC. We have negotiated a block booking at special rates for **Hotel H10 Taburiente Playa** and **H10 Costa Salinas Apartments** (right next to Taburiente Playa, operated by the same management). These apartments are specially intended for young researchers with restricted budgets.

Note: Please bear in mind that to attend dinner at any Spanish hotel you are not allowed to wear shorts.

Hotel H10 Taburiente Playa ☆☆☆☆

This magnificent 4 star hotel is located on the beachfront at Los Cancajos, the main tourist center of the Island. Special features of this hotel are a children's playground, tennis court, sauna and massages. All of the rooms are equipped with bathroom, hairdryer, balcony, direct telephone, air conditioning or heating, safe and minibar and satellite TV. Parking, gardens, 2 swimming pools for adults, 1 children's pool, table tennis, billiards and mini golf, mountain and sea views, restaurant and bars. Evening entertainment with live music and professional shows three times per week.

Occupation	Euros	Includes
Single	75,10	Breakfast, Lunch & Dinner
Single	63,10	Breakfast & Dinner
Single	60,10	Breakfast
Double	55,30	Breakfast, Lunch & Dinner
Double	43,30	Breakfast & Dinner
Double	40,30	Breakfast



H10 Costa Salinas Apartments ☆☆☆

An apartment complex with 5 floors in Los Cancajos, right next to H10 Taburiente Playa. All apartments are fully equipped with bathroom, living room, bedroom, kitchenette, direct telephone, safe deposit box, TV with Digital Plus channels and a balcony or terrace.

Occupation	Euros	Includes
Single	62,20	Breakfast, Lunch & Dinner
Single	50,20	Breakfast & Dinner
Single	47,20	Breakfast
Double	42,20	Breakfast, Lunch & Dinner
Double	30,20	Breakfast & Dinner
Double	27,20	Breakfast
Triple	39,68	Breakfast, Lunch & Dinner
Triple	27,68	Breakfast & Dinner
Triple	24,68	Breakfast



Cost for children

Between 3 and 5 years old= Free

Between 6 and 13 years old= 50% discount

All prices are in Euros per person/per night, and include all taxes (drinks are not included). You will only need to make additional payment for room service at the hotel, extra meals, drinks, telephone calls, etc.

Note: Cost of lunch for participants who will not stay at the Hotel will be **12,60 Euros** (beverages are not included).

Hotel Address: Hotel H10 Taburiente Playa & H10 Costa Salinas Apartments
Playa de Los Cancajos 24
38712 - Breña Baja
La Palma
Phone: +34 922 181 277

Reservations

To make the reservations, please fill in the corresponding **Hotel Reservation Form** and **send it directly to the LOC**, specifying the name of the participant you wish to share with (if applicable) **before May, 5th**. If you wish to share a double/triple room but do not have a roommate, just specify and we will try to arrange one for you.

We strongly encourage you to send the form as soon as your travel schedule is settled.

Do not attempt to make an on-line reservation directly through the Hotel's homepage. This on-line service is not able to deal with our block reservation for the period June 12th to 16th. The only way to get a reservation during that period and at the prices negotiated by the LOC is by submitting the Hotel Reservation Form.

Cancellations

If you have to cancel your reservation, please contact the LOC **prior to 31st May**, no charges will be apply.

SOCIAL EVENTS

Sunday, 11 th June	Welcome reception
Wednesday, 14 th June	Excursion to the Roque de los Muchachos Observatory (ORM)
Thursday, 15 th June	Closing dinner

All of the above social events are covered by the registration fee.

Price for accompanying persons: Excursion to the ORM (30 euros each) and Closing dinner (30 euros each).

Note: If you are planning to join us at the Observatory of the Roque de Los Muchachos (ORM) excursion, do not forget to send us the name and passport number of your accompanying person (if any) as we need this information for the GTC visit.

TRAVEL TO LA PALMA

Santa Cruz de La Palma has airport code **SPC**. Take care not to confuse this with either Las Palmas de Gran Canaria (on another of the Canary Islands [<http://www.canarias.org/eng/index.html>](http://www.canarias.org/eng/index.html)), or Palma de Mallorca (in the Balearic Islands, also Spanish but in the Mediterranean) or even any of the other towns called Santa Cruz which are scattered round the Americas, or even Santa Cruz de Tenerife.

Flights from continental Europe

Scheduled flights. Apart from a number of inter-island flights (see below) there is one daily direct return flight La Palma - Madrid, operated by Iberia (part of the OneWorld alliance with American Airlines). You can usually connect to this flight from Europe and other continents. Some direct flights from Germany to La Palma are also operated as scheduled services.

NEW: From the 1st of June Spanair will operate three times a week the connection Madrid-La Palma-Madrid:

Madrid – La Palma: Tuesdays, Thursdays= 13:05h and Saturdays= 14:30h

La Palma – Madrid: Tuesdays, Thursdays= 15:55h and Saturdays= 17:05h

IMPORTANT: Bear in mind that the connection Madrid-La Palma-Madrid with IBERIA operates during the whole week on **THE EXCEPTION of Thursday and Saturday**. The connection Tenerife-La Palma-Tenerife with *BINTER* and *Islas Airways* operates every day. THESE RESERVATIONS BETWEEN ISLANDS CAN ONLY BE MADE *IN SITU* (Canary Islands). If you should have any doubt or query, please send an e-mail to ebp@iac.es, stating in the subject: MRU Conference

Useful flight company links →:

[Iberia](#)

[KLM](#)

[Air-Berlin](#)

[Binter](#)

[British Airways](#)

[EasyJet](#)

[Transavia](#)

[Islas Airways](#)

Inter-island flights

There are frequent inter-island flights from Tenerife (north airport, TFN) to Santa Cruz de La Palma, and twice a day from Gran Canaria (LPA). Flights to La Palma should be booked in advance with the main ticket as seats are not always available in these small planes unless booked early. Flights take about 20 minutes from Tenerife and 50 minutes from Gran Canaria.

There are many scheduled and charter flights to Tenerife and Gran Canaria. Most charter flights to Tenerife operate from the south airport (TFS) and a transfer to the north airport will take at least one hour driving time, so at least about 3 hours must be accounted for. You can travel between airports by taxi, by bus (direct or via Santa Cruz de Tenerife) or by rental car (ask for one-way to the north airport, there are often cars available at a cheap rate).

TRANSPORT

Los Cancajos is located between La Palma airport and the capital Santa Cruz de La Palma and the distance from Los Cancajos to either of these two is about 4 km. Bus and taxi to/from the airport take 5-10 minutes.

Bus: There is a half-hourly bus service all day Santa Cruz-Los Cancajos-Airport and back.

Car hire: If you wish to hire a car, at a very good rate, we recommend you to use the services of CICAR (info@cicar.com / <http://www.cicar.com>). You may find the CICAR desk at the airport hall. The rate is around 30 euros/day, full insurance included.

Taxi: Taxi fares are around 6 Euros from/to Santa Cruz or the airport.

THE ISLAND OF LA PALMA

At the northwest of the Canary archipelago, a few hundred miles from the coast of north-west Africa, lies the island of La Palma, also known as *La Isla Bonita*, because of its extraordinary natural beauty.

La Palma is one of the smaller of the Canary islands, with a surface area of 706 square kilometres and a population of only 80,000. It is unusual in that it rises exceptionally steeply from the ocean, the entire central mountain range exceeding 2000m in altitude. The highest point on the island is the Roque de los Muchachos (2426m), the location of the astronomical observatory.

Weather

La Palma enjoys a sunny climate with year-round moderate temperatures. Average sea-level temperatures in Santa Cruz vary from 22° C in August to 15° C in January. There is a substantial seasonal variation in rainfall, with almost no rain from June to August, and a peak in November.

Temperatures drop substantially with altitude; average temperatures at the observatory ([El Roque de los Muchachos](#)) vary from 18° C in summer to 3° C in winter.

[WUnderground](#)

[ING's weather station](#)

[CNN La Palma 5-day forecast](#)

[GranTeCan webcam](#)

[ECMWF medium range forecast](#)

HEALTH AND INSURANCE

All participants are strongly recommended to arrange for medical insurance for the duration of their stay in the Canary Islands. The LOC will not accept liability for sickness or accidents. Spanish public health centres have co-operation agreements with most European Union countries.

In case of any kind of emergency, directly dial 112.

CHANGING MONEY

If you need to change foreign currency there are a large number of ATM or cash dispensers for a variety of cards (VISA, MasterCard, Maestro, AMEX, etc.) for instant cash. at both the airports. There is a small charge involved (approx. 4%).

There is a bank in the international arrivals lounge at the TFS, but this only operates from Monday to Friday from 08:30h to 13:30h; an exchange desk is available typically from 07:00h to 24:00h. Currency exchange facilities are also available at TFN. A Bank kiosk opens from Monday to Friday from 08:30h to 13:30h, and an exchange desk is available from 10:00h to 14:00h and from 18:00h to 22:00h. Nevertheless, if you have the chance to exchange money at Madrid airport where the service is permanently available in the international departure areas, we advise you do so because of the restricted bank opening hours at both Tenerife airports.