

IUCAF

6TH SCHOOL

ON SPECTRUM MANAGEMENT

FOR RADIO ASTRONOMY

WORKSHOP HANDBOOK

29 SEPTEMBER - 3 OCTOBER
2025

OBSERVATORIO ASTRONÓMICO NACIONAL. ALCALÁ DE HENARES, MADRID, SPAIN



INSTITUTO
GEOGRÁFICO
NACIONAL



SCIENTIFIC COMMITTEE
ON
FREQUENCY ALLOCATIONS
IUCAF
FOR
RADIO ASTRONOMY
AND
SPACE SCIENCE

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Introduction

The Spectrum Monitoring School 2025 Organizing Committee is please to invite you to Alcalá de Henares (Spain) and the Yebes Observatory on 29 September - 3 October 2025.

The School will train the next generation of Scientists, Engineers and Administrators in the skills enabling discoveries via observations using the radio spectrum. The meeting will take place in Alcalá de Henares, where part of the services of the National Astronomical Observatory of the IGN are located.

Alcalá de Henares has a remarkable cultural, architectural and gastronomic offer that you can enjoy during the conference. Located just 30 kilometers from Madrid, it was declared a World Heritage Site by UNESCO in 1998. Alcalá is also known for being the birthplace of Miguel de Cervantes, famous for his novel 'Don Quixote'. The University of Alcalá is the oldest and most prestigious university in Spain, founded by Cardinal Cisneros in 1499.

During the meeting we will enjoy different technical and cultural activities such as:

- Visit to the Yebes Observatory and informal dinner of “paella”, a typical Spanish dish.
- A formal dinner in the restaurant Casino in Alcalá de Henares. Plaza de Cervantes, 9, 28801 Alcalá de Henares, Madrid.
- **Guided tour through Alcalá city center. (Is subject to confirmation)**

We look forward to welcoming you to the SMS25 in Alcalá de Henares, Madrid!

Logistics

Getting from Adolfo Suarez-Barajas Madrid Airport to Alcalá de Henares City Centre

Adolfo Suárez Madrid-Barajas Airport (MAD) is the closest major international airport. Alcalá is about 30 km away and reachable by:

- **BUS:**
 - **DIRECT BUS LINE 824 CONNECTS TERMINAL T1 AND T2 OF MADRID-BARAJAS AIRPORT WITH ALCALÁ DE HENARES. RECOMMENDED OPTION.**
 - Stops at the airport:
 - Terminal T1. Floor 0. Arrivals
 - Terminal T1. Floor 1. Departures
 - Terminal T2. Floor 0. Arrivals
 - Terminal T2. Floor 2. Departures

In order to get from one terminal to another (T1, T2, T3, T4), passengers and visitors can use a free bus transport service between the airport terminals, 24 hours a day.

Contact: CRTM Madrid. +34 915 804 540

- **INTERURBAN LINE LINE 223 FROM AIRPORT TO MADRID (AVDA. DE AMÉRICA) AND THEN BUS MADRID – ALCALÁ DE HENARES.**

More information: [CRTM](#). Consorcio transportes de Madrid.

Logistics

Getting from Adolfo Suarez-Barajas Madrid Airport to Alcalá de Henares City Centre

- **TRAIN:**

MADRID CERCANÍAS RENFE (Suburban Train). From Madrid to Alcalá you can also go by train. Main stops in Madrid are Chamartin and Atocha.

- Line C2: Chamartín - Atocha - Alcalá de Henares – Guadalajara
- Line C7: P. Pío - Chamartín - Atocha - Alcalá de Henares

- **TAXI:**

Taxis are always available at the airport.

If you need to book a taxi from Alcalá to the airport:

- **ALCALÁ RADIO TAXI.**
Phone Numbers. +34 91 882 21 88; +34 91 882 21 79
- **UBER**
- **CABIFY**

Logistics

Transport from Alcalá de Henares City center to the Venue



DATE / TIME: SEPT. 29-OCT 3, 2025.

VENUE

**Centro de Investigaciones de Ciencias Geográficas y Astronomía.
Observatorio Astronómico Nacional.**

C. Escultor Claudio, 6A, 28805 Alcalá de Henares, Madrid.

<https://maps.app.goo.gl/iXp18YdWyhoPXJMt5>

Transport to the venue: As the venue is located far from the city center, a bus will be provided every day from the city center to the venue. (TBC)

The exact meeting point for the bus will be published soon but it will be close to the monument “Puerta de Madrid”. In that area, several recommended hotels are located (see hotels section below). (TBC)

Logistics

Photography and recording

Photography and recording are permitted with the prior consent of the individuals involved and the event organizers. Please be respectful and obtain permission before capturing images or audio during sessions or social events.

VISA information

Spain is part of the Schengen Area. Visa requirements vary depending on your nationality.

Check visa details here: <https://www.schengenvisainfo.com/spain-visa/>

If you need support with a tourist or business visa, please contact the SOC for assistance at iucafchair@iucaf.org

Registration

Registration fee: **100€ (tentative)**

Registration for in-person participation will close on the 29th of August 2025. Due to limited space, in-person attendance may be subject to approval, if capacity is exceeded. You will be informed by e-mail as soon as possible after your registration.

(Is subject to confirmation)

Official Website

[IUCAF 6th School on Spectrum Management for Radio Astronomy](#)



Logistics

Online participation

Information for online access to the meeting will be published soon.

Communication During the Conference

We will use Slack for real-time updates, group coordination, and announcements. Details and a group invite link will be shared before the event.

Wireless Internet Access

Complimentary Wi-Fi will be available at the venue. Most hotels and cafés in Alcalá also offer free public Wi-Fi.

Language

The official language of SMS 2025 is English.

Locally, most residents speak Spanish, and basic phrases can help in restaurants and shops.

Weather and Clothing

October in Alcalá typically sees mild autumn weather:

Daytime highs: 20-23°C (68-73°F)

Evenings: 10-12°C (50-54°F)

Occasional light rain - pack a light jacket or umbrella and dress in layers.

Health and Safety

Spain is safe and has modern medical facilities. No special vaccinations are required. Follow the usual precautions for personal belongings and avoid poorly lit areas at night.

Power and Connectivity

Spain uses Type C and F plugs (Europlug), with a standard of 230V / 50Hz. Please bring the appropriate adapters and check your devices for voltage compatibility.



Logistics

Currency and Payments

The local currency is the Euro (EUR).

Credit cards are widely accepted. Some small vendors may prefer cash. ATMs are available throughout Alcalá.

Emergency Contacts

Police: 112

Ambulance: 112

Fire Department: 112

Local conference assistance: please contact us at iucafchair@iucaf.org

Logistics

Accommodation

Please make your own bookings. Early booking of accommodation is strongly recommended. Here you can find some recommended accommodation close to the meeting point.

Hotels:

- Hotel Evenia Alcalá Boutique ***
- PCM Forum Alcalá ****
- Hotel El Bedel ***
- Parador de Alcalá de Henares ****
- Hotel Cisneros ***
- Hotel Miguel de Cervantes **
- Hotel Ciudad de Alcalá

Hostels:

- Hostal Complutum
- Hostal El Val

Coffee breaks and Lunch

Breakfast, coffee breaks, lunches, Yebes Observatory tour + informal dinner, and social dinner on Thursday are included in the registration fee. Please indicate in the registration form if you have a special dietary request (vegetarian, vegan, gluten-free, etc).

In case of attending the Yebes tour and/or the gala dinner with an accompanying person, please indicate it in the registration form. See Social Events section below.

Social events

Visit to Yebes Observatory. Wednesday, the 1st of October 2025

A bus will take the participants from the venue to the Yebes Observatory after lunch on Wednesday.

The Yebes Observatory, located in Yebes (Spain), is a remarkable scientific facility dedicated to astronomical and geodetic research and observation. The Yebes Observatory is equipped with a wide range of instruments. The observatory operates two VLBI radio telescopes: the 40-metre and the 13.2-metre VGOS telescope. It also has an SLR station, several GNSS stations and a gravimetry pavilion. In addition to the instruments, the Yebes Observatory has several laboratories and workshops.



Social events



In particular, it has a laboratory for cryogenic microwave amplifiers and passive devices, a laboratory for cryogenic radio astronomy receptors, a laboratory for electronics and detection devices, an electrochemistry laboratory, a laboratory for measuring microwave feeds (anechoic chamber), and two workshops with precision machining tools, including lathes, 5-axis machines and CNC machines, as well as general machining and metrology instruments. There is also a molecular spectroscopy laboratory that uses radio astronomy receivers and legacy astronomical observation instruments: a 14m radio telescope, a double astrograph, and a solar telescope. Our last integrating telescope is the YLARA (Yebes Laser Ranging) station, which started regular SLR operation by early 2024. YLARA will also be able to track space debris.

Yebes Observatory will become the first fundamental geodetic station in Spain, hosting 3 major space geodetic techniques and a local-tie network to interconnect them.

Social events

The visit to the observatory will include a coffee break and will end with an informal dinner of Spanish paella, one of the most famous dishes of the Spanish cuisine.



(Is subject to confirmation)

Social dinner. Thursday, the 2nd of October, 2025

A formal dinner in the **restaurant Casino in Alcalá de Henares**. (Plaza de Cervantes, 9, 28801 Alcalá de Henares, Madrid) at **8:00 pm**.

A group menu has been booked which includes the food, drinks, dessert, and coffee. Dinner is included in the registration.

In case of attending with an accompanying person, please indicate it in the registration. More information will be sent by e-mail.

Social events

City tour. Visit to Alcalá de Henares. Sunday 28th September

If there is enough interested participants, we are planning to offer a guided tour in the city center in Sunday afternoon (~ 6:00 pm).

Alcalá de Henares has a long and fascinating history. The city dates back to Roman times, when it was known as Complutum. It thrived as an important Roman city and later became an Episcopal seat during the Visigothic period. In the 8th century, it fell under Moorish rule but was recaptured by the Christians during the Reconquista. The city experienced a significant period of cultural and intellectual growth during the Renaissance when Cardinal Cisneros founded the University of Alcalá in 1499. This prestigious institution attracted scholars and thinkers, including the famous writer Miguel de Cervantes, who was born in Alcalá de Henares in 1547. Today, the city proudly preserves its rich heritage and is a UNESCO World Heritage Site, attracting visitors with its historical charm and literary significance.

(Is subject to confirmation)



MINISTERIO
DE TRANSPORTES
Y MOVILIDAD SOSTENIBLE

INSTITUTO
GEOGRÁFICO
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Schedule

(Is subject to confirmation)