Dear Participant,

We are glad to welcome you to the <u>Invisibles School 22</u> that will take place at IJCLab, in Orsay (southern Paris suburb), from **13** to **17 June** 2022.

Below you can find practical information regarding your stay and your participation.



# **Venue**

IJCLab is in the Orsay campus of Université Paris-Saclay (cf. map above), 25 km southwest from Paris downtown. The easiest way to reach the campus is by taking the local train RER-B (light blue on the map) and get off the train at the stop "Bures-sur-Yvette" [about 40 min from Paris and about 75 min from the Charles-De-Gaulle Airport].

#### Accommodation

**Accommodation** is arranged at the <u>Residhome Appart Hotel Bures la Guyonnerie</u> situated at Bures-sur-Yvette.

Since it is already arranged, there is no need for you to contact the hotel. Note that there is a 10-15min walk from the RER-B stop "Bures-sur-Yvette" to Residhome Bures, and about as much from Residhome Bures to the School venue.

Note also that there is a fully furnished kitchen in each room.

## **How to reach Bures-sur-Yvette?**

## Arrival by plane to Roissy/Charles de Gaulle:

Follow the signs "Paris by train" and "RER-B" and walk to the local train station. You should buy a ticket to "Bures-sur-Yvette" and then board a train in the direction of "Saint Rémy-lès-Chevreuse" (see the above map).

#### Arrival by plane to Orly:

Follow the signs "OrlyVal" and "Paris by train" and walk to the OrlyVal. Before boarding the shuttle you should buy a ticket to "Bures-sur-Yvette". The shuttle brings you to the RER-B stop "Antony" where you should get on a train heading in the direction of "Saint Rémy-lès-Chevreuse" (see the above map).

#### Arrival by train to Paris:

The main train stations in Paris are connected to the local train ``RER-B". At the *Gare du Nord* there is a RER-B stop underground. From the *Gare de Lyon*, instead, you can take the Métro (line 1) and join the RER-B at the stop ``Châtelet Les Halles''. In any case, you should buy a ticket to ``Bures-sur-Yvette'' and then board a train in the direction of ``Saint Rémy-lès-Chevreuse'' (see the above map).

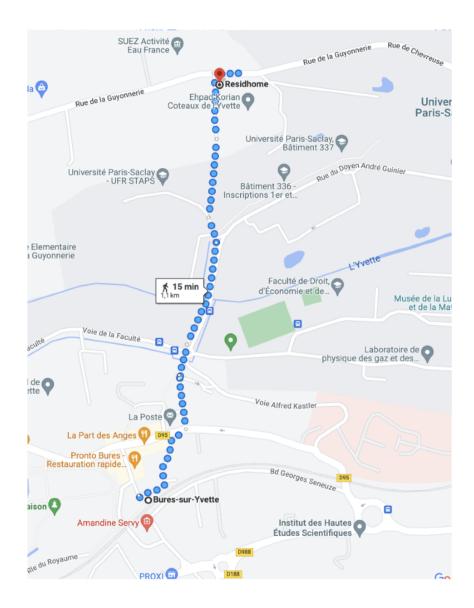
For more information regarding the public transportation in Paris please see <a href="https://www.ratp.fr/">https://www.ratp.fr/</a>

#### How to reach the hotel Residhome?

The address of the Residhome AppartHotel is

1A, rue de la Guyonnerie, 91440 Bures-sur-Yvette.

The easiest way is to walk from the RER-B stop "Bures-sur-Yvette" following the map appended below. The same map is available on <a href="https://goo.gl/maps/Edarq4xc3aNHX7nq9">https://goo.gl/maps/Edarq4xc3aNHX7nq9</a>
There will be signs to help you along the way and you should be at the hotel within 15 min.



Those who prefer to take a cab anyway, besides Uber there is a local Taxi service that you should book well in advance on <a href="https://www.itaxis.fr/bures-sur-yvette-91440.htm">https://www.itaxis.fr/bures-sur-yvette-91440.htm</a> (by ``in advance" we mean in the morning if you arrive late in the afternoon).

## **Invisibles School – Lectures**

- Neutrino Probes of New Physics Joachim Kopp
- Primordial Black Holes and Dark Matter Joseph Silk
- Monte-Carlo Tools for LHC Eleni Vryonidou
- Theory and Phenomenology of the SMEFT Adam Falkowski
- Physics of Axions Giovanni Villadoro
- Flavor Physics Svjetlana Fajfer

Lectures will take place in the Amphitheatre Pierre Lehmann [Campus Building 200]. The program is available on the Indico page <a href="https://indico.ijclab.in2p3.fr/e/school-invisibles22">https://indico.ijclab.in2p3.fr/e/school-invisibles22</a> and, for your convenience, also in this bulletin:

INVISI Week of:	bles School 22 - Or	say (France)			
	6/13	6/14	6/15	6/16	6/17
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	Neutrinos (ph) and Cosmo	Neutrinos (exp) and Cosmo	SMEFT and MC Tools	SMEFT and MC Tools	Axions and Flavors
9:30 AM	Neutrino probes of New Physics Joachim Kopp	Neutrino probes of New Physics Joachim Kopp	SMEFT Adam Falkowski	SMEFT Adam Falkowski	Axions Giovanni Villadoro
11:00 AM	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:30 AM	Primordial Black Holes and DM Joe Silk	Primordial Black Holes and DM Joe Silk	MC Tools for LHC Eleni Vryonidou	MC Tools for LHC Eleni Vryonidou	Flavors Svjetlana Fajfer
13:00 PM					
	Lunch	Lunch	Lunch	Lunch	Lunch
	Neutrinos (ph) and Cosmo	Neutrinos (exp) and Cosmo	Axions and MC Tools	Free afternoon	SMEFT and MC Tools
2:30 PM	Study time / tutorial	Study time / tutorial	Study time / tutorial		Study time / tutorial
3:00 PM	Tutorial Groups 1/2: Cosmo/Standard probes Groups 3/4: Neutrinos	Tutorial Groups 1/2: Neutrinos Groups 3/4: Cosmo/Standard probes	Tutorial Groups 1/2: MC Tools Groups 3/4: MC Tools		Tutorial Groups 1/2: SMEFT Groups 3/4: MC Tools
4:30 PM	Coffee Break	Coffee Break	Coffee Break	Free afternoon / Outreach	Coffee Break
5:00 PM	Poster Session (Reception Cocktail)	Discussion/seminar TBC	Tutorial Groups 1/2: MC Tools Groups 3/4: SMEFT		Discussion/seminar Sterile Neutrinos
6:00 PM	(Neception Cocktail)				Closing
7:00 PM			Social diner (et le Buron)		Closing

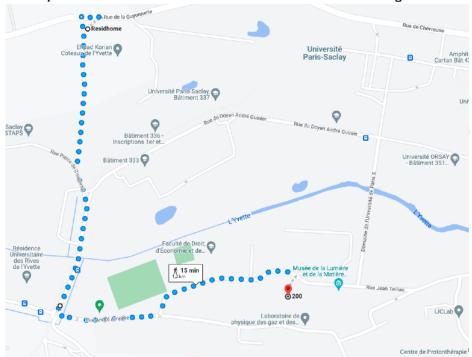
## **Invisibles School – Tutorials**

Tutorials will be organized in Building 200 and 210 (5min walk from 200). The designated tutors are:

- Neutrino Probes of New Physics Patrick Bolton and Salvador Rosauro
- Primordial Black Holes and Dark Matter Nicolas Bernal and Giacomo Landini
- Monte-Carlo Tools for LHC Xabier Marcano and Basabendu Barman
- Theory and Phenomenology of the SMEFT Jason Aebischer and Maria Ramos

## **Information and registration desk**

To walk from your hotel to the Building 200 please follow the map below, which is also available on <a href="https://goo.gl/maps/N8ysCZe2WrXdX2gq6">https://goo.gl/maps/N8ysCZe2WrXdX2gq6</a>. Notice that the **Registration** will take place on Monday from 9:00 to 9:30 AM at the entrance hall of the Building 200.



## **Poster Session**

The Poster Session will take place on Monday from 5:00 to 6:00 PM in the cafeteria of Building 200. Posters should be of the A0 or A1 size, and preferably in the *portrait* format. We will have a poster prize!

Please note that you should bring your poster with you and that <u>no</u> printing facilities for posters will be available during the School.

## **Meals during the School**

- Breakfast will be served in the hotel.
- Lunch will be provided in the CESFO cafeteria on the Campus. See map below, also available on <a href="https://goo.gl/maps/2wCnQyEd8QTmNqCx5">https://goo.gl/maps/2wCnQyEd8QTmNqCx5</a>



- Dinner will not be provided during the school. Here are a few suggestions of restaurants around Bures-sur-Yvette and Orsay:
  - Restaurant le 63: <a href="https://goo.gl/maps/kwXvhhDeQooiPgtJ8">https://goo.gl/maps/kwXvhhDeQooiPgtJ8</a>
  - o Bud's Deli: https://goo.gl/maps/oNGbFwgSKW6p38os7
  - Le Buron: https://g.page/LeBuronRestaurant?share
  - Mangata Restaurant: <a href="https://g.page/MangataRestaurantPatisserieFine?share">https://g.page/MangataRestaurantPatisserieFine?share</a>
  - o ...

Many more options are, of course, available in Paris or in the area around the RER-B stop "Massy-Palaiseau" [cf. the map on p1 of this bulletin].

Important: There are a few options for dinner in Bures-sur-Yvette/Orsay on Sunday evening. However, we advise the participants to come with a salad or sandwich before taking the RER-B to Bures-sur-Yvette. Otherwise, it is always possible to find open restaurants in Paris or Massy-Palaiseau [RER-B stop "Massy-Palaiseau", cf. map on p1].

## **Social Events**

- A welcome cocktail will be held at IJCLab [building 200 cafeteria] on June 13th.
- The social dinner is planned for June 15th at the Restaurant <u>"Le Buron"</u> starting from 7:00 PM.

# **Public lecture**

<u>The public outreach lecture</u> (*in French*) by Yann Mambrini (IJCLab) is scheduled for Thursday June 16th at 5:30 PM in the amphitheatre *Yoccoz* at the Mathematics Institute (IMO).

## **Connectivity WiFi**

Wifi connection is available in all buildings through the **Eduroam** network.

Important: Please make sure that you can access Eduroam with your institutional credentials <u>before</u> coming to the school.

#### WhatsApp group

A WhatsApp group has been created to facilitate communication among students. It is possible to join it via the following link: <a href="https://chat.whatsapp.com/JQOyzvMs8uZ32dHHRoLlJt">https://chat.whatsapp.com/JQOyzvMs8uZ32dHHRoLlJt</a>

For any problem you might encounter before or during the school please write on the WhatsApp chat indicated above or contact one of the organizers:

Asmaa Abada: asmaa.abada@ijclab.in2p3.fr

Olcyr Sumensari: olcyr.sumensari@ijclab.in2p3.fr

Damir Becirevic: <u>damir.becirevic@ijclab.in2p3.fr</u>

Rebeca Bello: rebeca.bello@uam.es

Local organizers: <a href="mailto:event@IJCLAB.IN2P3.FR">event@IJCLAB.IN2P3.FR</a>

We are looking forward to welcoming you in Orsay!





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