

in**o**visibles 15 Workshop 22nd-26th June, 2015

Place: IFT and Thyssen-Bornemisza Museum, Madrid

Welcoming

Neutrinos
Dark Matter
Dark Energy
New Physics

Invisibles meets Visibles

Higgs and Colliders
CP Violation
Flavour Physics
Art
Astrophysics
Cosmology

www.invisibles.eu

Workshop: <http://www.invisibles.eu/news/invisibles15>

André Derain, El puente de Waterloo, 1906
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This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 603221.

THE NETWORK INVOLVES NODES IN SEVEN EUROPEAN COUNTRIES AND ITS ASSOCIATED PARTNERS EXTEND TO SEVEN NON-EUROPEAN COUNTRIES :

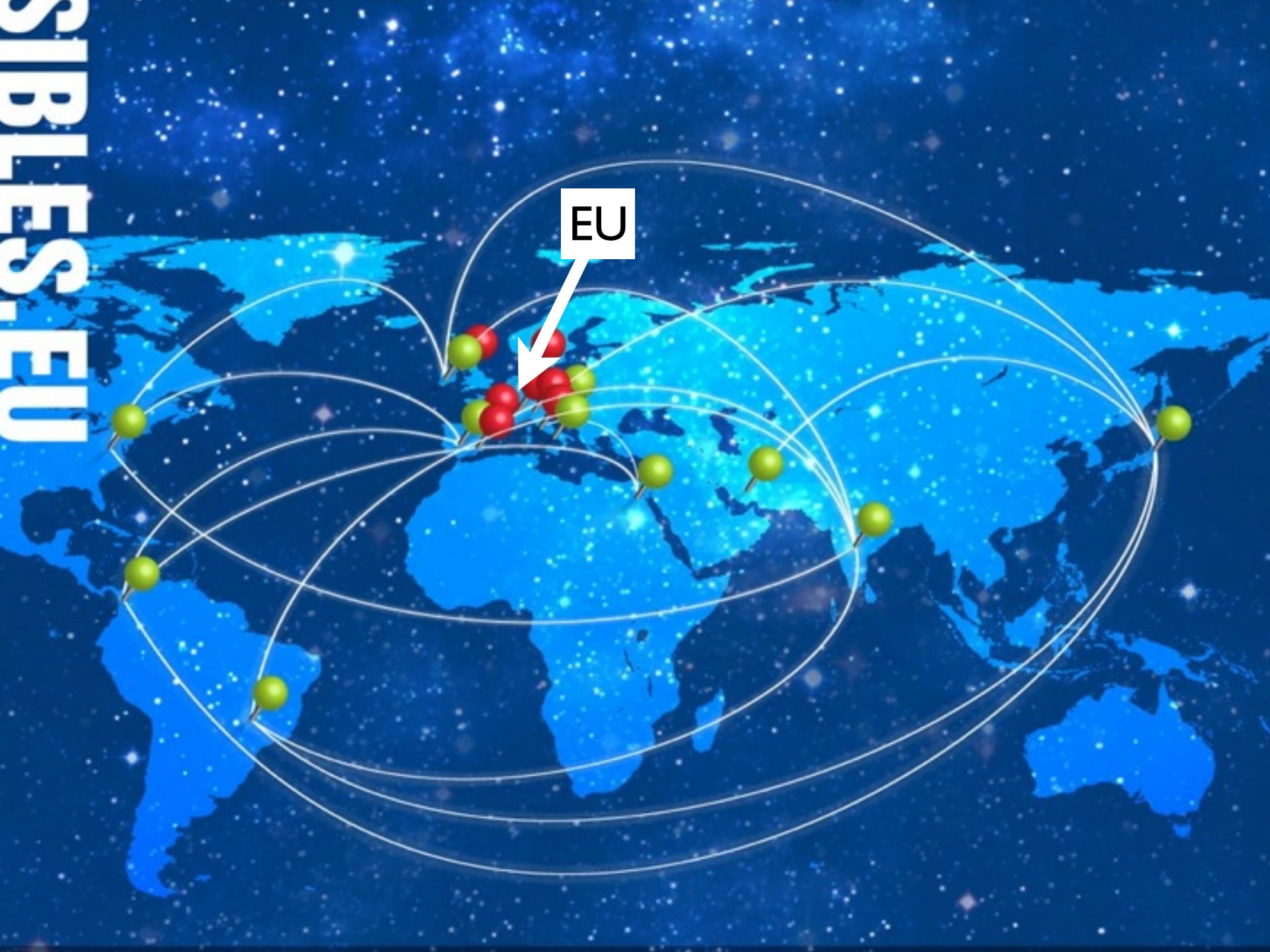
INVISIBLES.EU














EU ITN (Initial Training Network)

INVISIBLES

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SIBLES- EU

FULL PARTNERS			
	Universidad Autonoma de Madrid UAM Belen Gavela (Coordinator) <input type="button" value="+info"/> Public http://www.fluam.es		
	University of Durham UDUR Silvia Pascoli <input type="button" value="+info"/> Public http://www.lppp.dur.ac.uk		
	Aarhus Universitet AU Steen Hannestad <input type="button" value="+info"/> Public http://phys.au.dk		
	CNRS Asmaa Abada <input type="button" value="+info"/> Public http://www.th.u-psud.fr		
	Max Planck Gesellschaft MPG Manfred Lindner <input type="button" value="+info"/> Public http://www.mpi-hd.mpg.de		
	University of Goettingen-DESY UGOE Laura Covi <input type="button" value="+info"/> Public http://www.theorie.physik.uni-goe.de/~covi		
	INFN Stefano Rigolin <input type="button" value="+info"/> Public http://active.pd.infn.it/g4		
	Universidad de Barcelona UB Concepcion Gonzalez Garcia <input type="button" value="+info"/> Public http://www.ecm.ub.edu		
	Universidad de Valencia Pilar Hernandez <input type="button" value="+info"/> Public http://som.ific.uv.es		
	University of Zurich Laura Baudis <input type="button" value="+info"/> Public http://www.physik.uzh.ch/groups/grou...		
	University of Southampton Steve King <input type="button" value="+info"/> Public http://www.hep.phys.soton.ac.uk		









*The associated partners include strong experimental labs.

ASSOCIATED PARTNERS

	University of Tokyo  Takasaki Kajita +info http://www.icrr.u-tokyo.ac.jp/index_eng.html http://www.ipmu.jp		Stockholm University  Thomas Schwetz-Mangold +info http://www.fysik.su.se/
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	Stony Brook University  Concha Gonzalez Garcia +info http://www.stonybrook.edu		Harish Chandra Research Institute  Sandhya Choubey +info http://www.hri.res.in
			Inst. for Research in Fundamental Science  Yasaman Farzan +info http://physics.ipm.ac.ir

Private sector associated partners



	Hamamatsu Photonics Yoshikazu Hakamata http://www.hamamatsu.com
	GMV Aerospace and Defense Ana Curiel http://www.gmv.co
	Kromek Max Robinson http://www.kromek.com
	Medialab Enrico Balli http://medialab.sissa.it
	Narcea Prod. Multimedia 2MDC Eduardo Ramos http://www.2mdc.com

Invisibles 15

invisibles¹⁵ School 14th-20th June, 2015

Place: Madrid sierra

School Lectures include:

- Effective Field Theory - David B. Kaplan ◀
- Physics Beyond the Standard Model - Hitoshi Murayama ◀
- LHC Phenomenology - Gilad Perez ◀
- LHC Tools - Fabio Maltoni ◀
- LHC Experimental Aspects - Lydia Fayard ◀
- Flavour Physics - Yossi Nir ◀

www.invisibles.eu

<http://www.invisibles.eu/news/invisibles15>

La Cristalera: <http://www.lacristalera.com>



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 189443.

invisibles¹⁵ School 14th-20th June, 2015

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- LHC Phenomenology - Gilad Perez ◀
- LHC Tools - Fabio Maltoni ◀
- LHC Experimental Aspects - Lydia Fayard ◀
- Flavour Physics - Yossi Nir ◀

84 participants from all continents

The video of all lectures can be found at the Invisibles Youtube channel:

<https://www.youtube.com/channel/UCZNYjTsBtRs4jnx4CEmSFA>

www.invisibles.eu

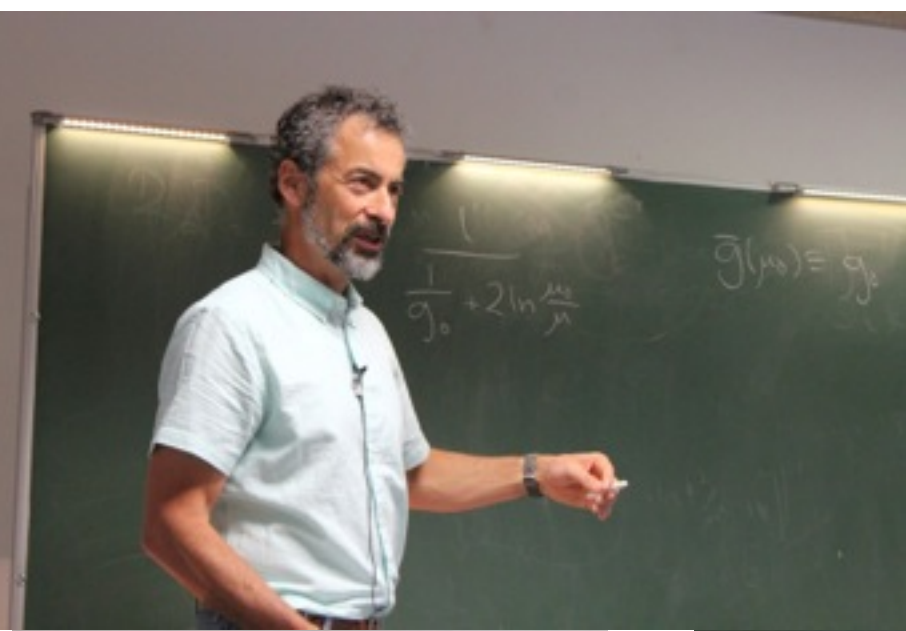
<http://www.invisibles.eu/news/invisibles15>

La Cristalera: <http://www.lacristalera.com>



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 189413.





Tutorials by:

- * **Matthias Blennow**
- * **Concha Gonzalez-Garcia**
- * **Steve Parke**
- * **Silvia Pascoli**

- * **Valerie Domcke**
- * **Pedro Machado**
- * **Valentina de Romeri**
- * **Ninetta Saviano**
- * **Cedric Weiland**

















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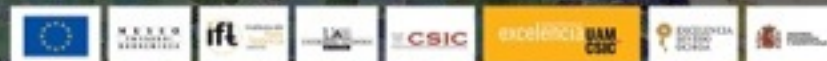
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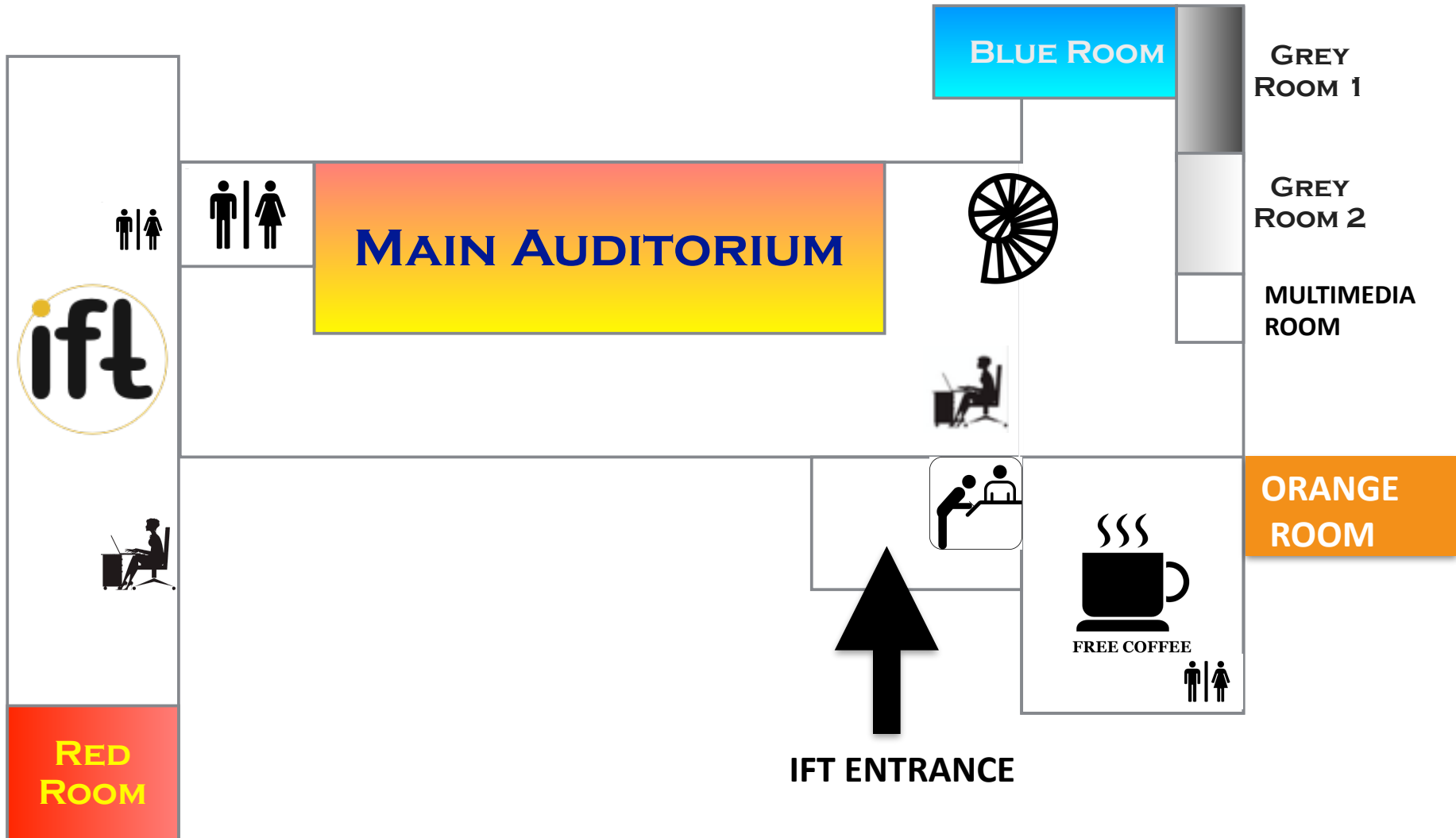
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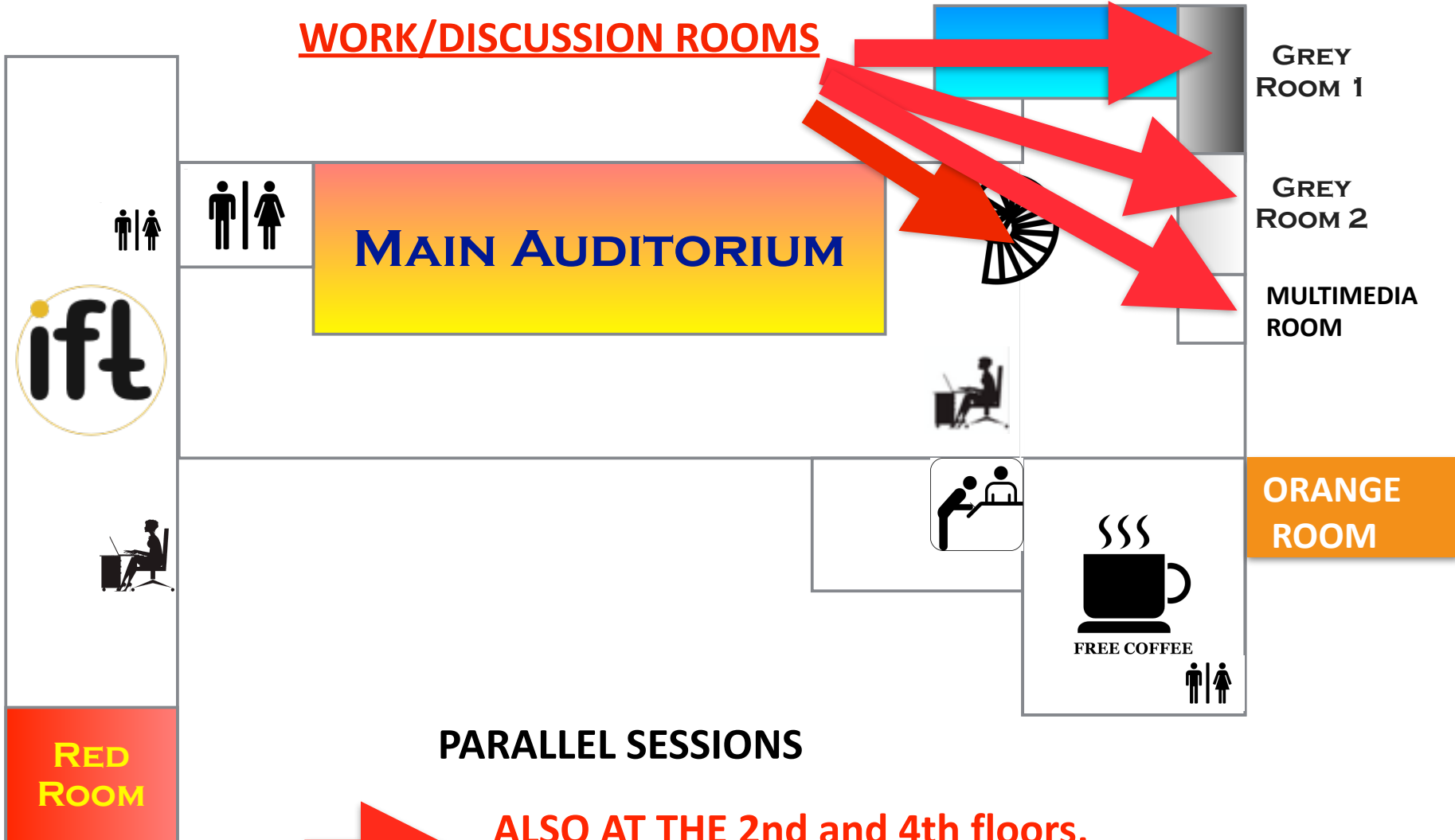
This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 603221.

IFT GROUND FLOOR



IFT GROUND FLOOR

WORK/DISCUSSION ROOMS

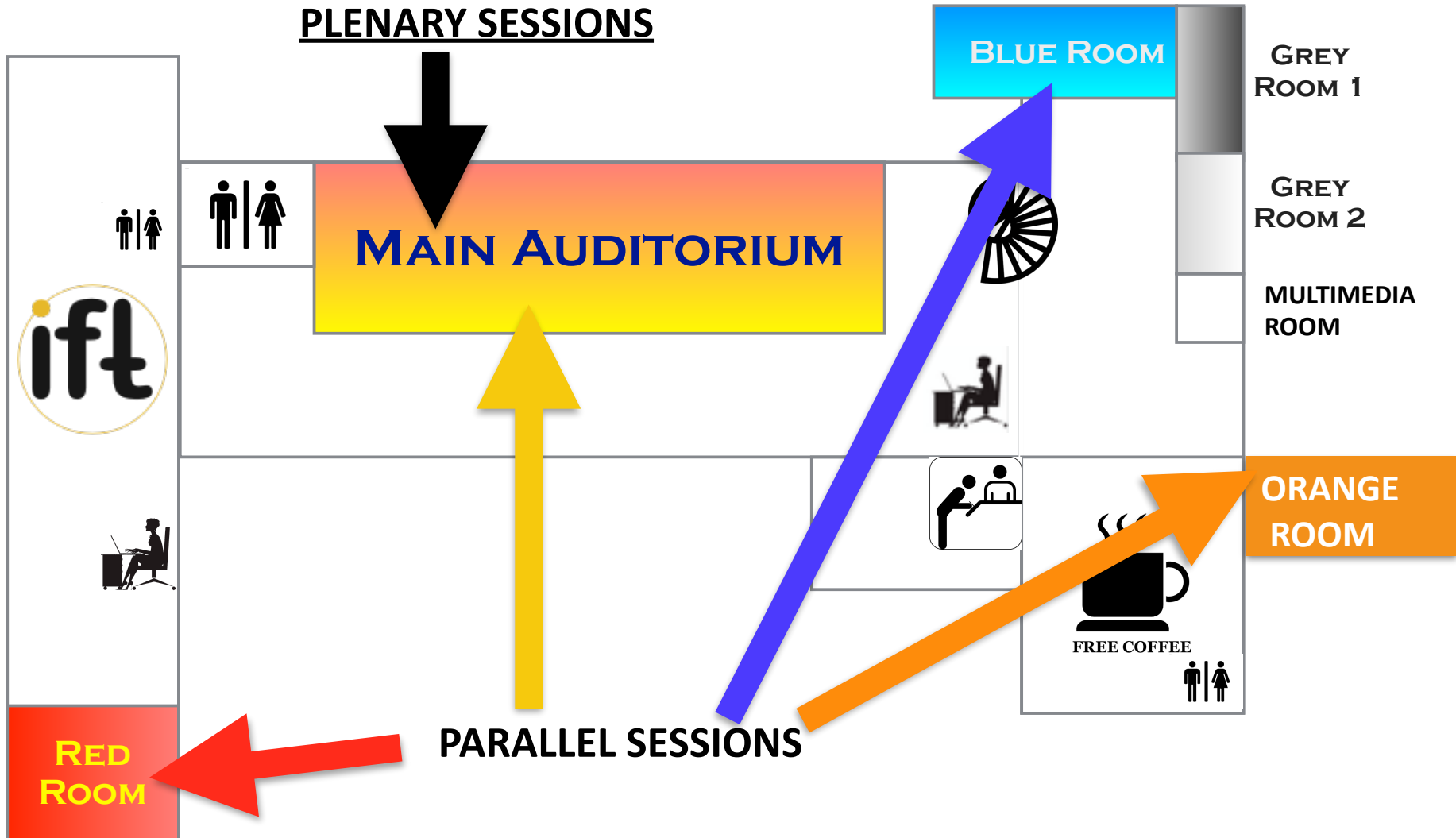


PARALLEL SESSIONS

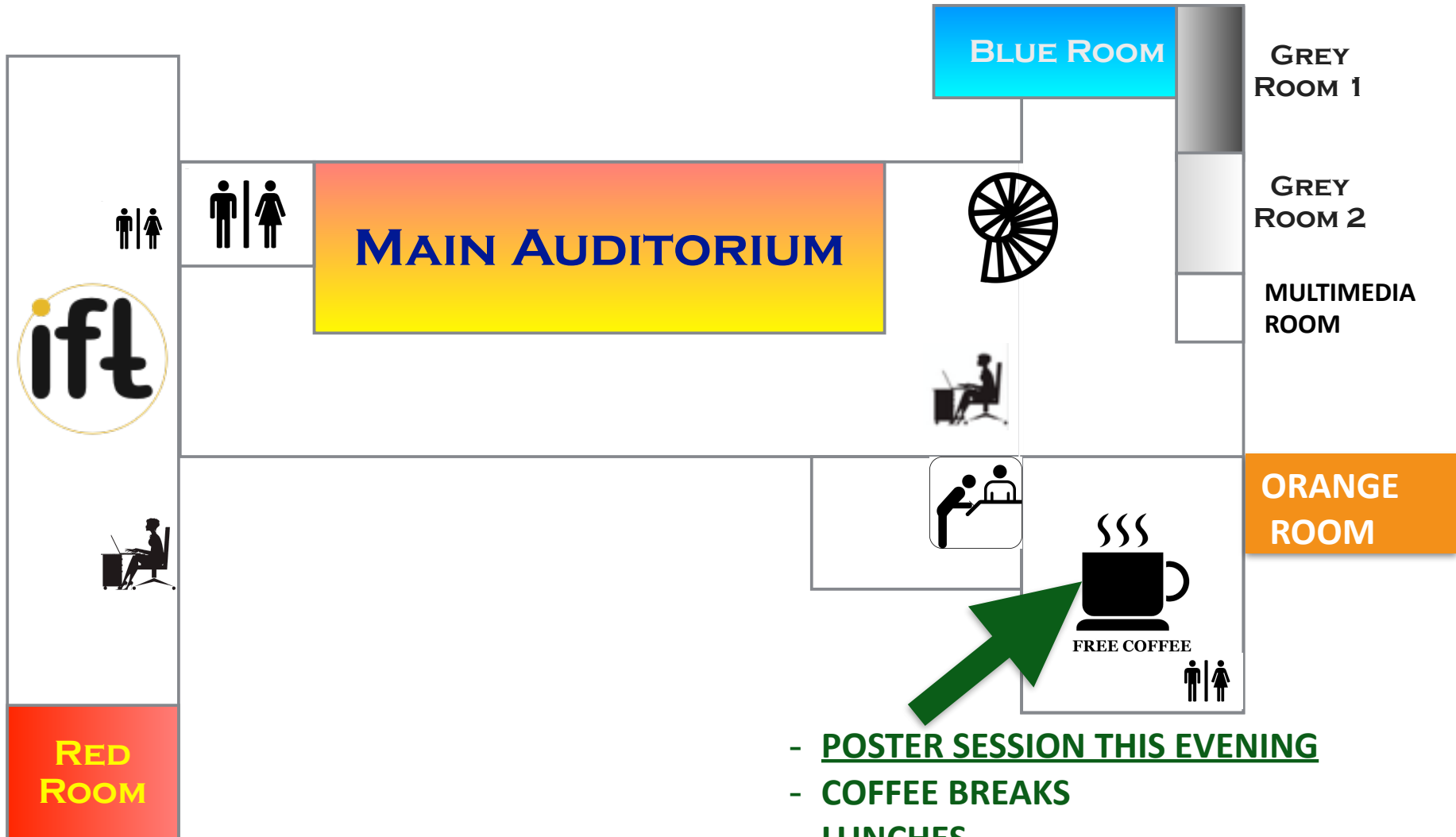


ALSO AT THE 2nd and 4th floors,
ROOMS AT EXTREME LEFT

IFT GROUND FLOOR



IFT GROUND FLOOR



- POSTER SESSION THIS EVENING
- COFFEE BREAKS
- LUNCHES
- RECEPTION THIS EVENING

POSTER COMPETITION TONIGHT DURING RECEPTION

- * PLEASE CAST YOUR VOTE IN THE BALLOT FORM HANDED TO YOU AT REGISTRATION AND DEPOSIT YOUR BALLOT IN THE BOX THAT WILL BE LOCATED IN THE ENTRANCE HALL**

- * THOSE HAVING REGISTERED LAST WEEK AT THE INVISIBLES15 SCHOOL:
DURING THE POSTER SESSION, PLEASE ASK THE ORGANISERS AROUND FOR
YOUR BALLOT FORM**

Last minute changes in schedules

PROGRAMME - PLENARY SESSION 22-26 June

	Mon 22 @ IFT	Tue 23 @ IFT	Wed 24 @ Museum	Thu 25 @ Museum	Fri 26 @ Museum
	Invisibles-H/Colliders	CPV-Invisibles	Flavour Interfaces	Invisibles-Astro	Invisibles-Cosmo
9:00- 9:30			Y. Wang	P. Gondolo	S. Galli
9:30-10:00	9:45: Welcome		R. Barbieri	F. Halzen	Y. Wong
10:00-10:30	H. Murayama	R. Peccei	S. Mertens	PhD Forum	PhD Forum
10:30-11:00	V. Sanz	G. Rybka	Coffee	Coffee	Coffee
11:00-11:30	Coffee	Coffee	L. Baudis	M. Ahlers	P. Madau
11:30-12:00	V. Khoze	J. Redondo	P. Huber	E. Aprile	Z. Weng
12:00-12:30	PhD Forum	PhD Forum	Disc. (R. Zukanovich)	M. McCullough	Disc. (G. Barenboim)
12:30-13:00	Disc. (A. de Rújula)	Disc.(G. Raffelt)	Lunch	Lunch	Lunch
13:00-14:00	Lunch	Lunch			
14:00-14:30			B. Batell	D. Hooper	G. Smoot
14:30-15:00	PARALLEL SESSIONS	J. Kopp	PhD Forum	PhD Forum	T. Kajita
15:00-15:30		PhD Forum	J. Zupan	Disc. (C. Boehm)	F. Gianotti
15:30-16:00		N. Rius	Coffee	Museum Visit	Coffee
16:00-16:30		Coffee			
16:30-17:00	Coffee	PARALLEL SESSIONS	OUTREACH EVENT C. Frenk A. de Rújula M. Mangano A. Muntadas chair: E. Aprile		OUTREACH EVENT F. Gianotti L. Henderson M. Livio L. Randall chair: H. Murayama
17:00-17:30	M. Mangano				
17:30-18:00	U. Ellwanger				
18:00-18:30					
18:30-19:00	Welcome Cocktail & Poster Competition				
19:00-19:30					
20:30			Conference dinner		

PROGRAMME - PARALLEL SESSIONS

Monday 22 June

	Higgs and Collider Physics <i>Chair: P. Fox Room: Orange</i>	Neutrinos and Flavour <i>Chair: S. King Room: Blue</i>	Dark Matter <i>Chair: M. Frigerio Room: Auditorium</i>	Cosmology <i>Chair: O. Mena Room: Red</i>
14:30-14:50	P. Tziveloglou	P. Mosteiro	V. Domcke	N. Saviano
14:50-15:10	S. Munir	V. de Romeri	A. Vincent	M. Archidiacono
15:10-15:30	E. Arganda	C. O'Shaughnessy	F. Kahlhoefer	J. Lopez-Pavon
15:30-15:50	G. Arcadi	E. Wildner	B. Zaldivar	J. Racker
15:50-16:10	J.M. No	M. Blennow	N. Bozorgnia	M. Drewes
16:10-16:30	J.J. Sanz Cillero	J. Bergstrom	Z. Liu	A. Adulpravitchai

Tuesday 23 June

	Higgs and Collider Physics <i>Chair: P. Fox Room: Orange</i>	Neutrinos and Flavour <i>Chair: S. King Room: Blue</i>	Dark Matter <i>Chair: M. Frigerio Room: Auditorium</i>	Cosmology <i>Chair: O. Mena Room: Red</i>
16:30-16:50	L. Lopez-Honorez	C. Bigglo	P. Coloma	G. Barenboim
16:50-17:10	P. Schwaller	J.I. Illana	T. Delahaye	M. Koval
17:10-17:30	T. Jaques	B. Panes	J. Herrero Garcia	A. Codello
17:30-17:50	M. Mitra	M. Reinoso	P. Machado	E. Majerotto
17:50-18:10	E. Stamou	O. Fischer	W.I. Park	V. Niro
18:10-18:30	K. Mimasu	P. Ballett	S. Vogl	R. de Putter
18:30-18:50	C. Weiland	Y. Farzan	M. Gustafsson	A. Notari

Monday and Tuesday

PROGRAMME - Ph.D. FORUM SESSIONS

22-26 June

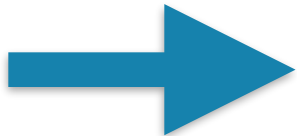
Monday 22		Tuesday 23 Morning		Tuesday 23 Afternoon		Wednesday 24	
Biggs and Collider		CPV and Axions		Neutrinos and Flavour		Neutrinos and Flavour	
12:00-12:06	I. Brivio	12:00-12:06	R. del Rey	17:00-17:06	J. Hernandez	14:30-14:36	D. Vicino
12:06-12:12	T. Corbett	12:06-12:12	T. Neder	17:06-17:12	F. Bjorkeroth	14:36-14:42	M. Ghosh
12:12-12:18	M. Buschman	12:12-12:18	O. de Lima Sumensari	17:12-17:18	A. Trautner	14:42-14:48	M. Ross-Lonergan
12:18-12:24	D. Croon	12:18-12:24	I. Hierro	17:18-17:24	X. Marcano	14:48-14:54	P. Bakhti
12:24-12:30	Y. Perez						
Thursday 24 Morning		Thursday 24 Afternoon		Friday			
Astro		DM		Cosmo			
10:00-10:06	C. Arguelles	14:30-14:36	D. Mayani	10:00-10:06	J. Setford		
10:06-10:12	I. Izaguirre	14:36-14:42	L. Ali Cavasonza	10:06-10:12	M. Kekic		
10:12-10:18	H. Vogel	14:42-14:48	M. Anthony	10:12-10:18	M. Lucente		
10:18-10:24	E. Kramer	14:48-14:54	P. Barrow	10:18-10:24	A. Ghalsasi		

Please upload the pdf of the talks to Indico asap;

at most the day before

or email the pdf to either:

- * Enrique Fernandez-Martinez: enrique.fernandez-martinez@uam.es
- * Pedro Machado: pedro.machado@uam.es
- * Luca Merlo: luca.merlo@uam.es or lucamerlo@gmail.com



All the talks will be in



and at the Invisibles Youtube channel

and at the IFT and Thyssen (outreach) webpages

Your badges are indispensable!!

■ Security reasons:

- At IFT, do not let leave your computers in the rooms unless when we may close their doors for a recess.
- **At THYSSEN-BORNEMISZA: nobody** allowed in without badge

NO BADGE  **NO THYSSEN**

■ Your badges should contain:

- **Workshop plenary programme**
 - **Ticket** with your chosen menu for the **Conference Dinner** (24th)
 - **Stickers** to access the **outreach events** at Thyssen the 24th and 26th if you requested them
- If you lose the badge/ticket/stickers you will **NOT** be able to attend the events! Bring them, and **don't lose them!**

SHUTTLE ON CAMPUS ALSO TOMORROW MORNING

NO CAMPUS SHUTTLE ON THE EVENINGS

At Thyssen-Bornemisza sessions start **at 9 am!!**

The Thyssen Auditorium is smaller than the IFT auditorium.

Please try to be there well in advance as basically all seats will have to be occupied

Wednesday and Friday

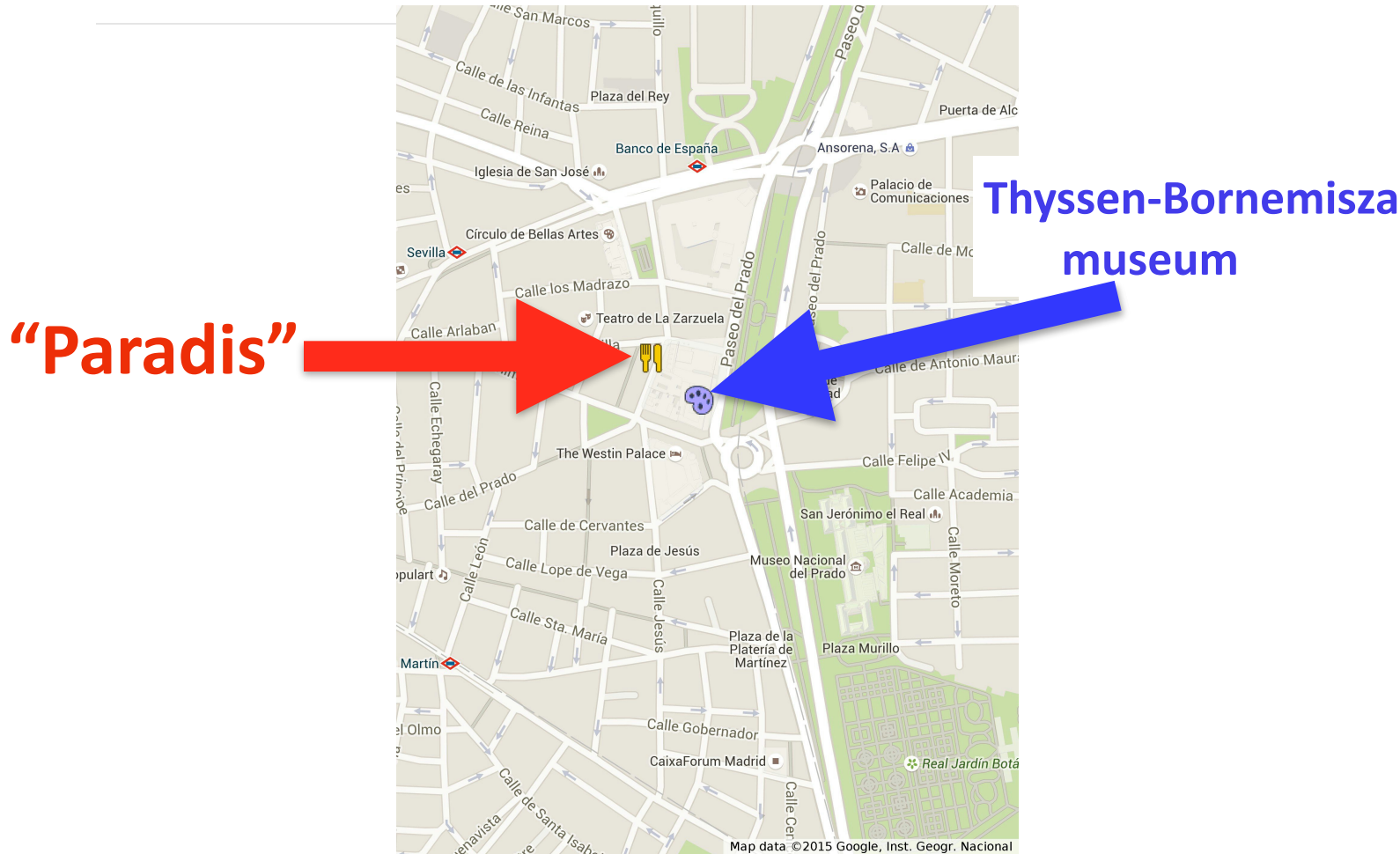
Outreach sessions at Thyssen-Bornemisza start **at 4 pm**
You will be allowed in only if you have the sticker

Thursday

Guided visit of the museum starts **at ~ 3.30 pm**

Wednesday, Thursday, Friday

At Thyssen: lunches 12:00 -13:30 at Restaurant "Paradis"



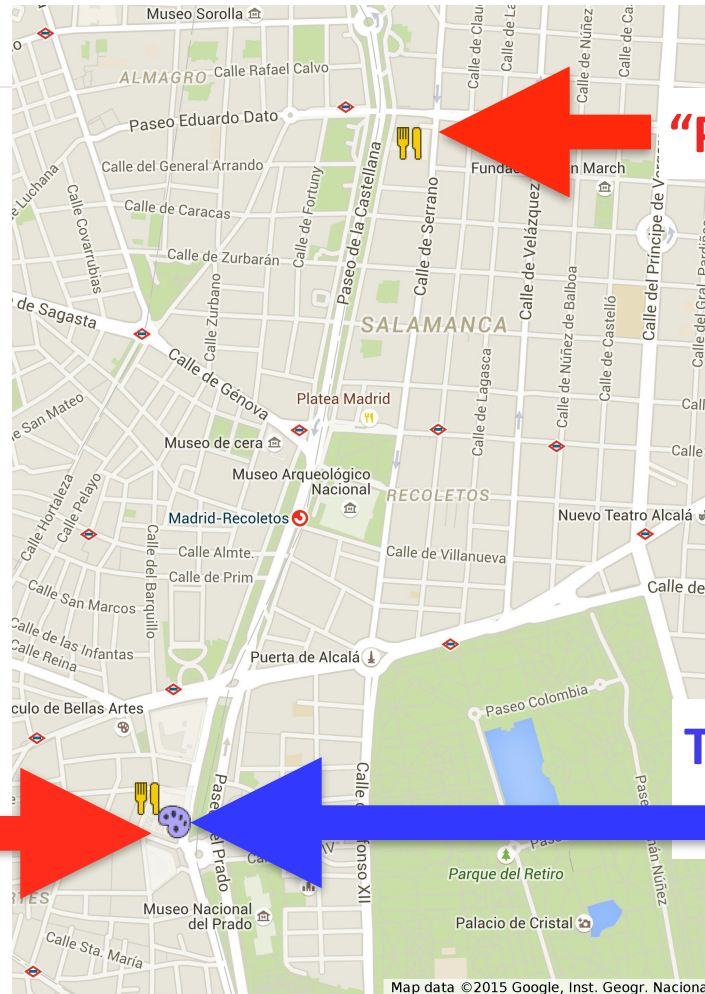
Wednesday

Conference dinner: Wednesday 8:30pm at Restaurant "Pedro Larumbe"

~ 20' walk from Thyssen
or go by taxi (a few euros)

"Paradis"

Thyssen-Bornemisza Museum



"Pedro Larumbe"

Thyssen-Bornemisza
museum

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Enjoy it!

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