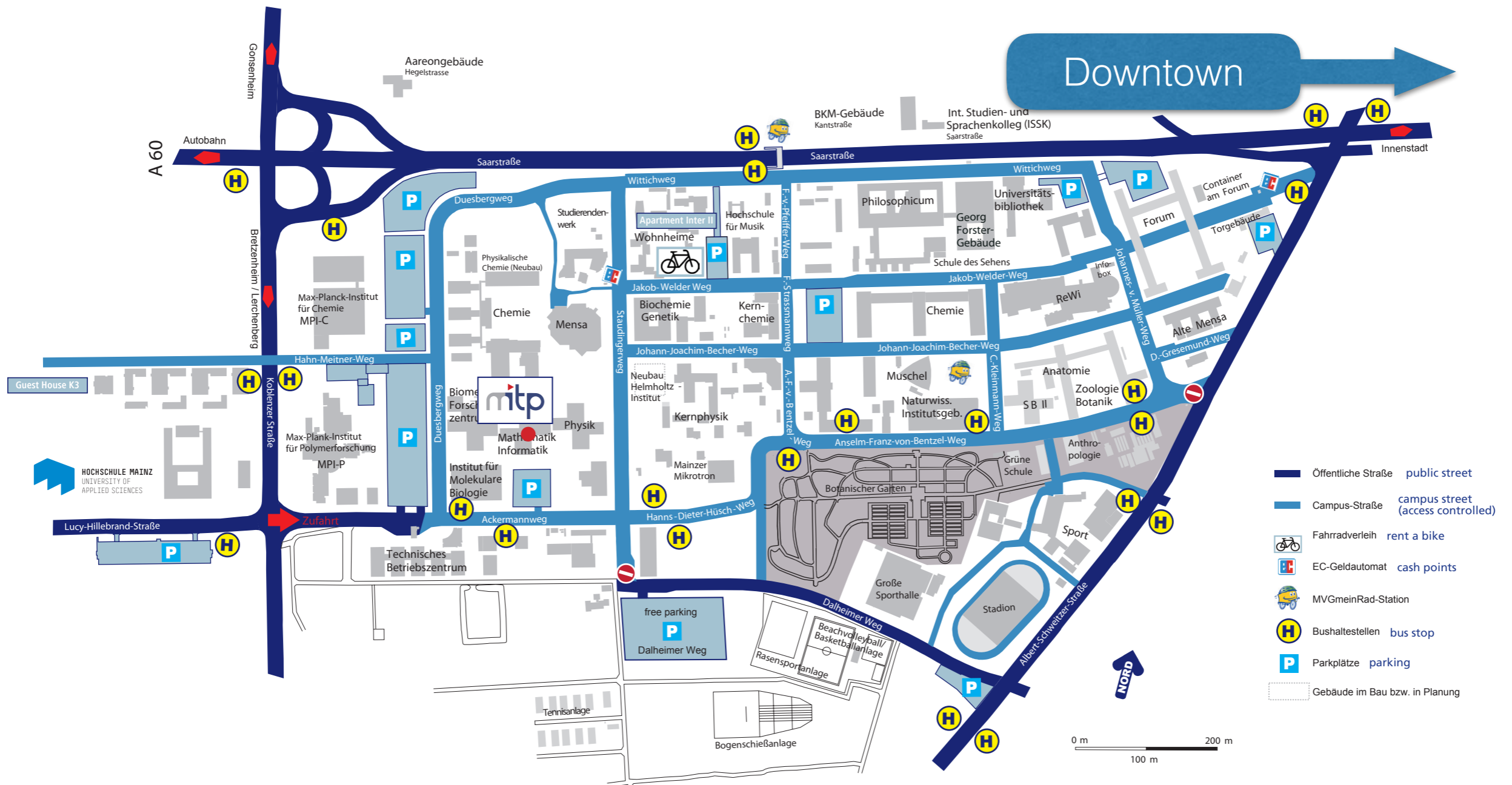

***MITP Scientific Program “Composite Dynamics:
From Lattice to the LHC Run II”***

**4 – 15 April 2016
University Campus, Mainz**

Welcome!

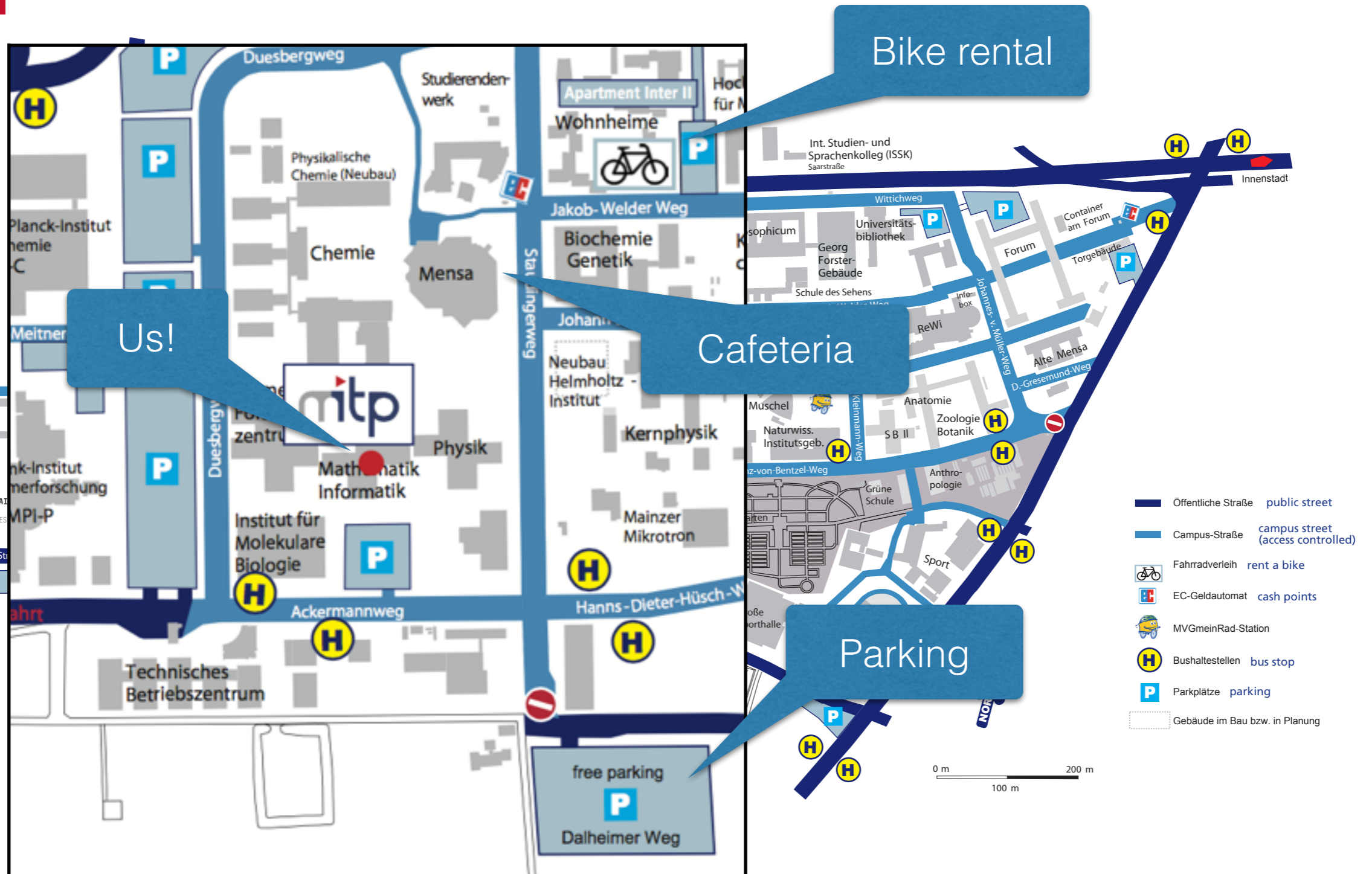


CAMPUS MAP





CAMPUS MAP



Guest House K3
 HOCHSCHULE MAINZ
 UNIVERSITY OF APPLIED SCIENCES
 MPI-P
 Lucy-Hillebrand-Str.

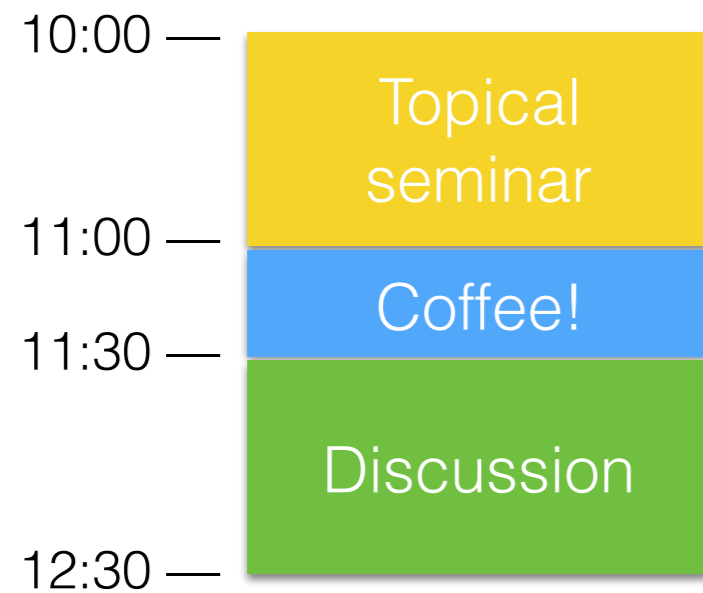
- Öffentliche Straße public street
- Campus-Straße campus street (access controlled)
- Fahrradverleih rent a bike
- EC-Geldautomat cash points
- MVGmeinRad-Station
- Bushaltestellen bus stop
- Parkplätze parking
- Gebäude im Bau bzw. in Planung

0 m 100 m 200 m

Practicalities

- No social events pre-organised: it's in our hands during the 2 weeks!
- Lunch: we can go together to the MENSA (upstairs cash payments allowed)
- Coffee break: 15h00
- Weekly bus tickets: at the Main train station!
- For any question, ask us, Heidi or Sybille

Physics



Lunch



Introducing a topic
(informal format!)
See program on Indico

Share your ideas about the
topic!

Participant's space:

- propose/give talks
- setting working groups
- discussion
- work done!
- visit Mainz
- enjoy local wine
- ...

Physics

10:00 —

Topic
seminar

Introducing a topic
formal f

11:00 —

11:30 —

The program will be continuously
updated!

14:00 —

Ask Giacomo to add something on the
Indico page.

Co

discussion

18:00 —

- vis.
- have a r
- ...

Physics

Week 1

	Speakers	Topics
Mon	Julius Kuti & Claudio Pica	Composite Higgs (on the Lattice)
Tue	Mads Frandsen & Oleg Antipin	Composite Dark Matter
Wed	Gabriele Ferretti & Luca Vecchi	Underlying theories
Thu	Kimmo Tuominen	Scalars and Cosmos
Fri	Nataschia Vignaroli	Pheno of Topological Terms

Compositeness

- What do we know in 2016?
- What can we learn in 3 years from lattice, and for which theory?
- Are there any cracks in the SM hinting to composite dynamics?
- What are the key ingredients for a natural composite Higgs sector?
- Is an effective field theory for the Higgs enough to call the extension composite?
- Can we rule out CD of any kind systematically (via CL rather than naive statements)?
- What does one gain by paying the price of compositeness in the Dark sector?
- If Naturality is a must, wouldn't inflation be composite too?
- A satisfactory theory of flavour does not exist. Does it mean that all the CD extensions are a wishful thinking?
- Is asymptotic free needed?

Compositeness

- What do we know in 2016?

- What

- Are

Foreseen outcome of the workshop:

- What

- Is a

- write proceedings/white paper answering some of the questions

composite?

- Can

statements)?

- What

- new collaborations and papers

ector?

- If Na

- *please acknowledge MITP!

- A sa

CD

extensio

- ...

The organisers:



Giacomo Cacciapaglia (IPN Lyon/CNRS, France)



Francesco Sannino (CP3-Origins, Denmark)



Thomas Flacke (Korea U., South Korea)

...and...