

# News & kick-off of the comprehensive review editing

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First SaporeGravis Workshop, December 2<sup>nd</sup> 5<sup>th</sup> 2013,  
Nantes University, France

The project "Study of Strongly Interacting Matter" (acronym HadronPhysics3) is an integrating activity (IA) of the Seventh Framework Programme (FP7) of EU.

Home Grant agreement Guide for beneficiaries Project documents 1st periodic report Past meetings Public website

# HadronPhysics3

Home

## Networking activities

The nine Networking Activities cover all of the most important issues in hadron physics: from the structure of the nucleon to the characteristics of the quark-gluon plasma...

Read more

## Joint Research Activities

The time-frame of this proposal coincides with the preparation phase of new experiments in hadron physics and the upgrade phase of running experiments.

Read more

## Transnational access

Integrating Activity offer transnational access for state-of-the-art research based on unique performance of the accelerators and high quality of service...

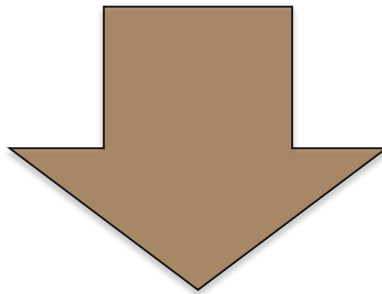
Read more

<http://www.hadronphysics3.eu/>

# HP2 → HP3



## WP8 of I3HP2: ReteQuarkonii



### WP8 of I3HP3: SaporeGravis.

Measurement of open heavy flavours is an experimental challenge of the heavy ion experiments in the world and crucial for the interpretation of the physics results. Direct study of the deconfined phase of matter. 2012-2014

# After HadronPhysics3

- Horizon 2020 EU program.
- Hadron Physics 3 will prepare a new proposal to be submitted to the European Commission in the upcoming Calls.
- Launching an internal call for work packages to be included in the future Proposal.
- Similar budget and for 3 years.
- It will be call HHP (Horizon Hadron Physics) coordinated by Ulrich Wiedner and Carlo Guaraldo.
- Deadline March 2014.
- See presentation by Giuseppe Bruno this morning.

# Web Page

TWiki > [ReteQuarkonii Web](#) > SaporeGravis (16-Apr-2013, GinesMARTINEZGARCIA)

 [Edit](#) [Attach](#) [PDF](#)

## Welcome to the SaporeGravis web

[SaporeGravis](#) is a networking of the [I3 Hadron Physics program](#) of the EU 7th FP. [SaporeGravis](#) is the natural continuation of the [ReteQuarkonii networking](#). [SaporeGravis](#) aims at studying the production of open heavy flavour and quarkonia in hadronic collisions at ultra relativistic energies. The Large Hadron Collider (LHC) is opening new possibilities for studying the properties of the strongly interacting matter at high temperature and for studying non-perturbative features of QCD. Quarkonia and open heavy flavours will be abundantly produced and correlations with other global observables of the heavy ion collision like centrality and/or reaction plane will allow for studying the properties of the QGP phases. At such high-energy hadronic collisions, Quarkonia will also be abundantly produced in diffractive and electromagnetic processes including both diffractive pomeron- and photon- induced quarkonium production. About 27 research groups of 12 different countries participate to the [SaporeGravis](#) project. [SaporeGravis](#) will organize one training school for PhD and two conferences between experimentalists and theorists, and it will work on a comprehensive review of the first data obtained at the LHC and RHIC in the last 5 years about quarkonia and open heavy flavours. The duration of the [SaporeGravis](#) project is 36 months, starting on January 1st 2012 (end December 31th 2014).

## SaporeGravis collaboration

- [List of Participants to ReteQuarkonii and SaporeGravis network](#)
- [Organisation of SaporeGravis](#)

## SaporeGravis Activities : Schools, Workshops, Meetings

- [First SaporeGravis Day Meeting](#) in Orsay (23 novembre 2012)

## Comprehensive Review of Quarkonia and Open Heavy Flavour data from LHC and RHIC.

- Starting to work

<https://twiki.cern.ch/twiki/bin/view/ReteQuarkonii/SaporeGravis>

# SaporeGravis

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graph TD; SaporeGravis --> OpenHeavyFlavours; SaporeGravis --> Quarkonium; SaporeGravis --> DiffractionPhotoproduction; SaporeGravis --> ColdNuclearMatter; SaporeGravis --> FutureProjects;
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## Open Heavy Flavours

A. Dainese (Exp., Padova), P.B. Gossiaux (Th., Nantes), D. Stocco (Exp., Nantes)

## Quarkonium

R. Arnaldi (Exp., Torino), T. Dahms (Exp., Palaiseau), E. Ferreiro (Th., Santiago)

## Diffraction/Photoproduction

G. Contreras (Exp., Prague)  
J. Nystrand (Th./Exp., Bergen, Norway)  
R. Schicker (Exp. Heidelberg, Germany)

## Cold Nuclear Matter

F. Arleo (Th., Annecy), C. Hadjidakis (Exp., Orsay), P. Rosnet (Exp., Clermont)

## Future Projects

A. Andronic (Th./Exp., Darmstadt), J.P. Lansberg (Th., Orsay) R. Tieulent (Exp., Lyon)

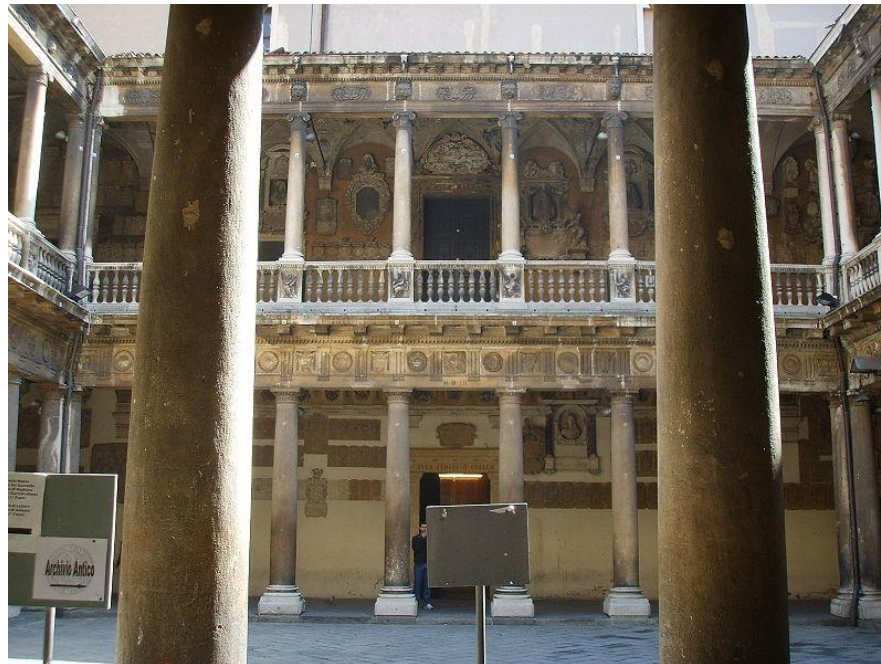
# 1<sup>st</sup> SaporeGravis Meeting, November 23<sup>rd</sup> 2012, Orsay, France

- ✓ Organisation of the networking.
- ✓ Working groups conveners.
- ✓ New task: Comprehensive review about heavy flavour and quarkonium physics in heavy ion at LHC energies.
- ✓ Potential workshops to be sponsored by SaporeGravis were discussed:
  - ✓ First SaporeGravis Workshop in Nantes
  - ✓ Working Meeting in GSI, middle 2014 (after QM)
  - ✓ Workshop in Padova, tentative date: December 9<sup>th</sup> 12<sup>th</sup> 2014



# SGW2014: When and Where

- First half of Dec 2014 (10-12?) in Padova, Italy
  - Padova is located in the North-east of Italy, at 40 km from Venice
- Venue: city centre



From Andrea Dainese



# Travel and Hotels

- **Venice Airport:**
  - 94 international destinations (incl. US)
  - Flight costs roundtrip
    - Geneva ~ 100 €
    - Paris ~ 150 €
    - Frankfurt ~ 200 €
- **Treviso Airport:**
  - 44 international destinations, mostly low-cost airlines
- **Hotels:** several possibilities within walking distance
  - Single room from 30 €

# Ambitious objective

- Realize a comprehensive review of the first LHC run (2010-2013).
- Hundred pages document.
- It will be presented as a deliverable of the SaporeGravis Networking.
- To be finished end of 2014 (end of the Hadron Physics Project).
- To be submitted for peer review.

# What about its content?

- What have we learned from the first run at the LHC focusing on the topic of Heavy Flavour and Quarkonia in HIC.
- Experimental results : Not to be presented by experiment but by observable, and comparing with previous experiment at lower energies (SPS, RHIC)
- Theory models: models have to be described emphasizing the physics inputs. The description of the models will be standardized in the document.
- Still many other issues to be discussed and decided by the conveners of the WGs

# Kick-off

We foresee one chapter for each WG:

- Cold Nuclear Matter effect and reference
- Open Heavy flavours
- Quarkonium
- Diffractive physics (UPC)
- Future Upgrades & Experiment

Each chapter will be coordinated by the conveners of the WGs.

We are starting to get organized.

Initial goal is to have a zero versions draft middle 2014.

Those who are interested are invited to contact the conveners.

# Next Steps

- Discussion about the zero-draft middle 2014, during the meeting in Germany.
- Internal Review process and a first draft September 2014.
- Discussion of new results made preliminary in 2014 and update of the draft for the Workshop in Padova in December.