

# The new call of HadronPhysicsHorizon

beyond Sapore Gravis

# Horizon 2020 and *HadronPhysicsHorizon*

- First EU Call for the Program Horizon 2020, with the instrument of "Integrating Activities", early next year
- The HadronPhysics3 Management Board, together with the selected Coordinator for the HadronPhysics project in Horizon 2020, prof. **Ulrich Wiedner**, is serving as **Steering Committee** to prepare the new proposal "HadronPhysicsHorizon" (HPH)
  - internal call for activities (WP), deadline: **March the 1<sup>th</sup> 2014**
  - 3 categories of activities:
    - **networking**
      - transnational access and/or service activities
      - joint research activities
  - some 30 WPs expected, ~ 10 per category
- Submission of the HPH proposal will be between August and October 2014

# to summarize

- Horizon 2020, call 2 “Integrating Activity “
- overall project title: “**A horizon for Hadron Physics: mastering challenges in a globalized world”**
- Acronym: ***HorizonHadronPhysics (HPH)***
- Coordinator: **U. Wiedner**
- time duration: 3 years, 2015 - 2018

In the two past analogue calls, the *ReteQuarkonii* and *Sapore Gravis proposals* were selected as Work Packages of the HadronPhysics2 and HadronPhysics3 programs, respectively

# Current HadronPhysics3 program

<http://www.hadronphysics3.eu>

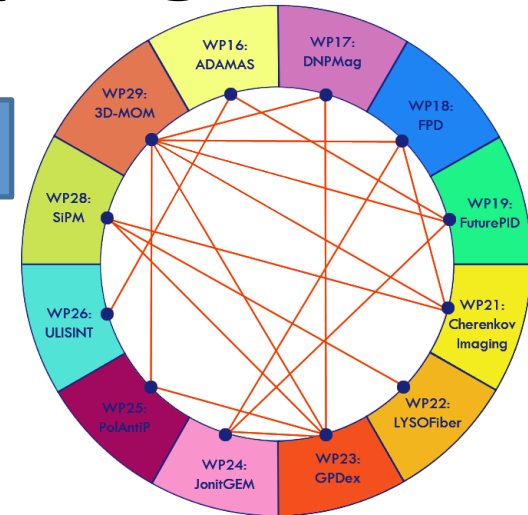
## Networking activities

1. MAN: Management of the Consortium
2. THURIC: Theory of Ultra Relativistic Heavy Ion Collisions
3. ENCstudy: Feasibility study for an electron-nucleon collider in Europe
4. EPOS: Exciting Physics Of Strong Interactions
5. MesonNet: Meson Physics in Low-Energy QCD
6. SPHERE: Strange Particles in Hadronic Environment Research in Europe
7. FAIRnet: A worldwide research networking activity for experiments on QCD at FAIR
8. **SaporeGravis: Heavy flavoured probes of deconfined QCD matter**
9. LEANNIS: Low-energy antikaon-nucleon and -nuclei interaction studies
10. LatticeQCD: Lattice Quantum Chromodynamics

# Current HadronPhysics3 program

<http://www.hadronphysics3.eu>

## Joint Research Activities



16. ADAMAS: Advanced Diamond Assemblies
17. DNPMag: Internal Magnets for DNP
18. FPD: Frontier Photon Detectors
19. FuturePID: Future Particle Identification Techniques
20. FutureJet: Cryogenic jets of nano- to micrometer-sized particles for hadron physics
21. CherenkovImaging: Development of high rate compact Cherenkov imaging technology
22. LYSOFiber: Frontier scintillation detectors based on inorganic fibers
23. GPDex: Generalized Parton Distributions
24. JointGEM: Ultra-light and ultra-large tracking systems based on GEM technology
25. PolAntiP: Polarized Antiprotons
26. ULISINT: Integration of ultra-light silicon tracking and vertex detection systems
27. Di-JETCAL: A Di-Jet Electromagnetic Calorimeter for Jet Quenching Study
28. SiliconMultiplier: Matrix Geiger-Mode Avalanche Micro-Pixel Photo Diodes
29. 3D-Mom: Three-dimensional momentum structure of hadrons

# Current HadronPhysics3 program

<http://www.hadronphysics3.eu>

## Transnational access

11. Transnational Access to ECT
12. Transnational Access to MAMI
13. Transnational Access to GSI
14. Transnational Access to COSY
15. Transnational Access to INFN-LNF

### [Transnational access](#)

The Research Infrastructures participating in the HadronPhysics3 Integrating Activity offer transnational access for state-of-the-art research based on unique performance of the accelerators and high quality of service and equipments. These facilities supply a coherent spectrum of capabilities to maximise the synergies with the available resources.

# some key words of this new call

- main challenges:
  - Mastering the following challenges:
    1. high-tech
    2. precision
    3. complexity
    4. data
    5. international collaboration challenge
      - special interest in external collaboration with institutions from US (funded by DOE), Japan, Russia, China, India, Thailand and Brazil

# a proposal from this very community for the new call ?

- strict interplay between experimentalists and theoreticians
  - strength of ReteQuarkonii and SaporeGravis
  - fundamental for a *networking* proposal
  - has to be kept
- difficult to imagine a better organization than present
- we should nevertheless try to introduce some novelties in the proposal
  - suggestions are very welcome
- I think that we should have a focus on the analysis and interpretation of the new data from the LHC run2