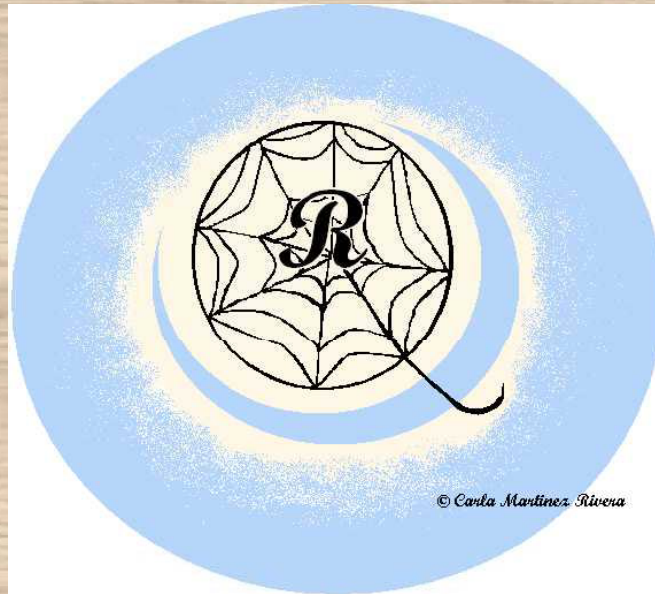


WP8: ReteQuarkonii



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Gínés MARTÍNEZ GARCÍA
Subatech, Nantes

Outlook

- *Goals*
- *Collaboration*
- *Organisation*
- *News and plans*
- *Financial matters*
- *Conclusions*

Goals

ReteQuarkonii aims at studying the production of quarkonia in hadronic collisions at ultra-relativistic energies. In the next 10 years, the future Large Hadron Collider (LHC) will open new possibilities for studying the properties of the strongly interacting matter at high temperature and the non-perturbative features of QCD. Quarkonia will be abundantly produced and correlations with other global observables of the heavy ion collision like centrality and/or reaction plane will allow a detailed investigation of the quark-gluon plasma (QGP) phases. In 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.



I3HP2 collaboration meeting,
Frascati, September 5th 2009

ReteQuarkonii
Network



Collaboration

- Belgium: Louvain (th);
- Denmark: Copenhagen NBI (alice);
- Finland: Uppsala (th);
- France CNRS/IN2P3 et IRFU/CEA: Annecy (th), Clermont (alice, na60), Nantes (th, alice), Lyon (alice, cms), Orsay (alice), Palaiseau (phenix, cms), Saclay (alice);
- Germany GSI, UHEI: Hamburg, Heidelberg (th, alice), Darmstadt (th, alice);
- Italy INFN: Bari (alice), Cagliari (alice, na60), Padova-Legnaro (alice), Torino (th, alice, na60);
- Norway: Bergen (phenix, alice);
- Poland: Cracow INP (th), Warsaw SINS (th);
- Spain: Santiago (th);
- Russia: Gatchina PNPI (alice, th), Moscow ITEP (alice, th) & INP (th);
- Switzerland: Geneva CERN (cms);
- Ukraine: Kiev BITP (th);

12 countries, 25 groups



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Organisation

Coordination
Gines Martinez

Cold Nuclear Matter effects

R. Granier de C. (Palaiseau, France)
E. Scomarini (Torino, Italy)

Hot Nuclear Matter effects

A. Andronic (Darmstadt, Germany)
P. Crochet (Clermont, France)

- ✓ Expected yields of a pA program(s) at LHC
- ✓ Uncertainty of shadowing effect at LHC
- ✓ Prediction of CGC models at LHC;
- ✓ Precision in the determination of cold nuclear matter effects, from pA data, AA collisions at LHC.

- ✓ Hot nuclear matter effects on quarkonia productions at LHC;
- ✓ Determination of the reaction plane in LHC experiments (using in full ALICE versus V0, pixel, FMD, ...);
- ✓ Expected precision of J/psi elliptic flow at LHC;
- ✓ Quarkonia polarization at LHC

J. Nystrand

- ✓ Existing databases in experimental high energy and nuclear physics;
- ✓ Selection of quarkonia results;
- ✓ Guide-lines for model comparison with experimental data.
- ✓ Reference for quarkonia hot nuclear effects.

F. Prino (Torino, Italy)

S. Porteboeuf (Palaiseau, France)

News and plans

- *Start-up meeting, dec 08, Pairs:*
 - *2 workshops between theorist and experimentalist: April-July 2010 and April-July 2011;*
 - *1 school for Ph.D student in 2010, Torino;*
 - *Web mail and retequarkoni mailing list;*
 - *Organisation and physics items to be addressed;*
 - *Actions to dynamic soft diffractive physics at LHC;*
- *Two days meeting about diffractive physics, June 25-26th 2009, CERN;*
- *Workshop on “Diffractive and electromagnetic processes at the LHC” in ECT, Jan 4-8th 2010, Trento, Italy;*



*I3HP2 collaboration meeting,
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Post-doc positions

- *Two post-doc positions in CNRS/IN2P3 and INFN;*
- *The CNRS/IN2P3 post-doc position was open in April 2009;*
- *6 candidatures were received,*
- *Mrs. Sarah PORTEBOEUF got the position and she will start in october 1st in the LLR, Palaiseau, France;*

Financial matters

Budget from European Community within I3HP3 for ReteQuarkonii (WP8)

Contr. No	Contractor Acronym	Personnel (EUR)	Travel and workshops (EUR)	Total direct costs (EUR)	Indirect costs (EUR) (7%)	EC contribution (EUR)
1	INFN	51,402	50,000	101,402	7,098	108,500
9	GSI	0	10,000	10,000	0	10,000
19	UHEI	0	85,000	85,000	0	85,000
30	CNRS	48,000	60,879	108,879	7,621	116,500
	TOTAL	99,402	205,879	305,281	14,719	320,000

ReteQuarkonii expenses until September 4th 2009

Contract No.	Contractor Acronym	Object	Expenses (euro)
19	UHEI-PI	Diffraction Workshop, June 25-26 th 2009	12,600



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Conclusions

- *ReteQuarkonii networking has been organized:*
 - *Mailing list & Wiki web page & Logo;*
 - *Physics Working groups and conveners;*
- *1st Post-doc position attributed (oct-09)*
- *Event in 2010 are being planned:*
 - *Trento Workshop on soft diffractive (jan);*
 - *1st ReteQuarkonia Workshop (under discussion);*
 - *Ph.D student school (under discussion);*
 - *Post-doc position in Italy for ReteQuarkonii;*