

September 7th-11th 2015 Palaiseau, France

6th International Conference on Physics Opportunities at an Electron-Ion Collider

FIRST ANNOUNCEMENT

Sixth International Conference on Physics Opportunities at an Electron-Ion Collider (POETIC6)

September 7-11, 2015

Ecole Polytechnique Palaiseau, France

We are pleased to announce that POETIC6, the International Conference on the "Physics Opportunities at an ElecTron-Ion Collider" will take place at Ecole Polytechnique in Palaiseau, France from Monday, September 7th to Friday, September 11th 2015, a few weeks before the National Science Advisory Committee recommends a new Long Range Plan to the United States' DOE and NSF.

In the midst of this much-anticipated report, and following earlier workshops at Stellenbosch, Bloomington, Valparaiso, Jyvaskyla and Yale, it is timely for the POETIC series to become an international conference. The primary goal will remain to continue the advancement of the field of electron-ion collider physics.

While the central theme of the conference will be the physics of a future electron-ion collider, the workshop will also cover strongly-related physics in the CEBAF, RHIC, and LHC experimental programs. The conference will aim primarily at developments on the theory/phenomenology side, but the latest accelerator and experimental developments of interest will also be reviewed. It will foster exchanges between theory, phenomenology and experiment.

The conference will cover topical issues at the frontier of hadron structure and explore outstanding open questions. Topics discussed will include:

- QCD at high parton densities and small-x evolution: BFKL, Color Glass Condensate.
- Quark and gluon content of nucleons and nuclei: (nuclear) parton distribution functions, hadron and jet fragmentation.
- Spin and 3D structure: helicity distributions, transverse momentum dependent (TMDs) and generalized parton distributions (GPDs).

- The properties of colored probes in cold nuclear matter: modifications of quarkonia production, jet formation and evolution, hadronization.
- Complementarity and connections of EIC physics with p+p, p+A and A+A collisions: high-pt processes, diffraction, multi-parton interactions, quark-gluon plasma, colored probes in hot nuclear matter.
- Physics beyond the Standard Model and connections to other areas in physics.
- Future DIS facilities: accelerator and detector developments.

The conference will be held within the Ecole Polytechnique, close to Paris and with convenient public transportation to its center. In addition to the plenary sessions, parallel sessions will also be organized if deemed necessary. Young physicists, post-docs and students, are especially encouraged to attend; some financial support will be available for them.

More detailed information will be provided in a second circular later this year. In addition, updates will be regularly posted on the conference web site <u>http://poetic6.sciencesconf.org</u>.

Contact: poetic6@sciencesconf.org

We are looking forward to seeing you in Palaiseau!

The Local Organizing Committee:

Francois Arléo	(Polytechnique/LLR - Palaiseau),
Raphaël Dupré	(IPN - Orsay),
Cyrille Marquet, Chair	(Polytechnique/CPHT - Palaiseau),
Bernard Pire	(Polytechnique/CPHT - Palaiseau),
Franck Sabatié, Chair	(CEA/IRFU - Saclay),
Ingo Schienbein	(LPSC - Grenoble),
Grégory Soyez	(CEA/IPHT - Saclay),
Samuel Wallon	(LPT – Orsay).

The International Advisory Committee:

Nestor Armesto	(Santiago de Compostela, Spain),
Elke Aschenauer	(Upton, United States),
Daniel Boer	(Groningen, Netherlands),
Marco Contalbrigo	(Ferrara, Italy),
Markus Diehl	(Hamburg, Germany),
Rolf Ent	(Newport News, United States),
Max Klein	(Liverpool, United Kingdom),
Andrzej Sandacz	(Warsaw, Poland),
Marco Stratmann	(Tuebingen, Germany),
Lech Szymanowski	(Warsaw, Poland),
Tony Thomas	(Adelaide, Australie),
Thomas Ullrich	(New Haven, United States),
Raju Venugopalan	(Upton, United States).