



Contribution ID: 454

Type: **Invited Speaker / Conférencier invité**

Quark-Novae : Implications to High-Energy and Nuclear Astrophysics

Monday 15 June 2015 16:15 (30 minutes)

After a brief account of the physics of the Quark-Nova (explosive transition of a neutron star to a quark star), I will discuss its implications and applications to High Energy and Nuclear Astrophysics. The talk will focus on Quark-Novae in the context of Super-Luminous Supernovae and in the context of the origin of heavy elements (r-process nucleosynthesis). The Quark-Nova has the potential to provide new insight into explosive astrophysical phenomena and the origin of some elements in the periodic table, by naturally combining the might of researchers in nuclear physics, sub-nuclear physics and astrophysics.

Rachid Ouyed (UofC)

Primary author: Prof. OUYED, Rachid (University of Calgary)

Presenter: Prof. OUYED, Rachid (University of Calgary)

Session Classification: M2-5 Nuclear Astrophysics (DNP) / Astrophysique nucléaire (DPN)

Track Classification: Nuclear Physics / Physique nucléaire (DNP-DPN)