



Contribution ID: 732

Type: **Parallel Talk**

## Exhibition "The beginning of everything. About galaxies, quarks and collisions"

*Friday 7 July 2017 14:30 (15 minutes)*

The exhibition "The beginning of everything", which runs from October 2016 to August 2017, has been created in collaboration between the Natural History Museum Vienna and the Institute of High Energy Physics (HEPHY) of the Austrian Academy of Sciences and was visited by more than 300 000 people including about 120 000 children and youth until mid-March 2017. „The beginning of everything“ taking visitors on a journey more than 13 billion years back into the past, to the start of the universe, and by communicating most recent scientific knowledge of particle physics and cosmology in a readily comprehensible manner. Renowned Austrian artists such as B. Kowanz and artwork from the art@CMS project by M. Hoch offer a contrasting approach to this complex topic from different visual, optical and acoustic angles and perspectives.

Starting with our solar system and spectacular pictures of the stars and galaxies taken by the Hubble Space telescope the visitor enters the very early universe where the particles become massive, protons and neutrons form and last but not least free electrons combine with atomic nuclei to neutral atoms. The dominance of dark matter in the universe, matter/antimatter asymmetry as well as supersymmetry are also on focus. Accordingly, the most recent scientific findings and experiments are shown. Visitors can explore the world's largest scientific experiment of CERN, and discover how fundamental science has changed the world as we know it. Hands-on exhibits for instance the „cosmic microwave background machine“, the interactive touch screen „Big Bang“, and the 1:20-scale model of the CMS-Detector makes the complex topic more understandable. The exhibition is accompanied by an extensive programme with lectures, guided tours with experts, matinees with artists, concerts, etc. Educational programmes for schools and kindergarten are offered. In addition, the fulldome show „The phantom of the universe“(german version) will be shown at the NHM Planetarium.

### Experimental Collaboration

**Primary authors:** SCHIECK, Jochen (Austrian Academy of Sciences (AT)); DEMONTE, Brigitte (HEPHY Vienna)

**Presenter:** SCHIECK, Jochen (Austrian Academy of Sciences (AT))

**Session Classification:** Outreach, education, diversity

**Track Classification:** Outreach, Education, and Diversity