



Contribution ID: 290

Type: **Contributed**

## Conceptual consequences of the NewSI to the unit of pressure

*Monday 18 June 2018 10:15 (20 minutes)*

The New SI (which will very probably be adopted this autumn) will no longer be a mere set of the definitions of the units, but an organic system binding the units and the invariant constants of Nature. The approaching redefinition will become a complete turn to the system of units being interdependent by the defining constants and at the same time it will cause a dissolution of the border between the basic and the derived SI units. Hence, it will require an increased attention to its educational aspects, highlighting a need of a correct usage of the quantity calculus. Without it, the users would not be able to appreciate the New SI. The presentation will focus on the unit of pressure as an illustrative example of a unit derived from the physical invariants. It will show its position in the system in a synoptic way and emphasize its wider relations to the existing concepts of the systems of units for the theoretical physics (like the Planck system).

**Author:** Dr PRAZAK, Dominik (Czech Metrology Institute)

**Presenter:** Dr PRAZAK, Dominik (Czech Metrology Institute)

**Session Classification:** Vacuum Science & Technology

**Track Classification:** Vacuum Science & Technology