Contribution ID: 5

## New Methods in Supersymmetric Theories and Emergent Gauge Symmetry

Wednesday 13 August 2014 14:00 (1 hour)

It is remarkable that light or even massless spin 1 particles can be composite. Consequently, gauge invariance is not fundamental but emergent. This idea can be realized in detail in supersymmetric gauge theories. We will describe the recent development of non-perturbative methods that allow to test this idea. One finds that the emergence of gauge symmetry is linked to some results in contemporary mathematics. We speculate on the possible applications of the idea of emergent gauge symmetry to realistic models.

Presenter: KOMARGODSKI, Zohar (Weizmann Inst.)