



**Conference on Long-Range Interacting Many-Body Systems:  
from Atomic to Astrophysical Scales  
(25 - 29 July 2016)**

**Venue: ICTP Leonardo da Vinci Building - Budinich Lecture Hall**  
(tel: +39 040 2240346, fax: +39 040 224163, e-mail: [smr2830@ictp.it](mailto:smr2830@ictp.it))

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Title:

**Hybrid percolation transition induced by long-range dynamics**

Speaker:

**Byungnam KAHNG**

Affiliation:

Department of Physics and Astronomy  
Seoul National University  
Korea

Percolation transition had been known as a generic continuous transition. However, recently many percolation-related models in complex systems show discontinuous or hybrid phase transitions. Here I show that such types of percolation transitions can occur based on long-range dynamics. Critical properties of the hybrid percolation transitions are compared with those of ordinary continuous percolation transition.