

Fizički odsjek Prirodoslovno matematičkog fakulteta Sveučilišta u Zagrebu  
Bijenička c. 32, HR-10000 Zagreb

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## Seminar Fizičkog odsjeka

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Vrijeme (s.t.)

Mjesto

petak 10. 10. 2014., 14 h točno

predavaonica F201, II. kat

## Phase Separation in Spin Systems

**Andrej Zorko**

Jožef Stefan Institute, Ljubljana

Phase separation in a uniform system is a widespread phenomenon found in diverse fields of matter, ranging from biological systems to soft matter and strongly correlated electron systems. Electronic inhomogeneity is a fascinating effect, well known from high-Tc cuprates, colossal magnetoresistive manganites and many other transition-metal oxides. It is related to competing degrees of freedom and it generally requires active charge degrees of freedom. However, a similar phenomenon may be expected also in geometrically frustrated spin systems with multiple competing degenerate phases. I will present a paradigm of an intrinsically inhomogeneous magnetostructural state that was recently experimentally detected in a triangular-lattice antiferromagnet. The crucial role of geometrical frustration and near-degenerate crystal structures in stabilizing this unprecedented ground state will be discussed.

Voditelji seminara FO

Damir Pajić i Ivica Smolić