

Speaker: **Alexandra Soskova**
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Wednesday, March 26, 2014
11:30 am
Room: 184 Nieuwland Science Hall

Title: Joint spectra and Relative spectra of structures

Abstract:

We generalize the notion of degree spectrum of a structure with respect to a finite sequence of structures. We study the set of all lower bounds of the generalized notions in terms of enumeration and omega-enumeration reducibility. We apply the last Soskov's results on Marker's extensions of a sequence of structures which demonstrate that for any sequence of structures the Marker's extension codes the elements of the sequence so that the n -th structure of the sequence appears positively at the n -th level of the definability hierarchy. The results provide a general method given a sequence of structures to construct a structure with n -th jump spectrum contained in the spectrum of the n -th member of the sequence. As an application a structure with spectrum consisting of the Turing degrees which are non- low_n for all $n < \omega$ is obtained.