

Katedra aplikovanej informatiky FMFI UK  
Ústav aplikovanej informatiky FIIT STU  
Spoločný seminár Umelej inteligencie

## **Pozvánka**

V pondelok dňa 2. 3. 2009 o 14.00 hod. v učebni I9 FMFI  
UK, blok I, prízemie

bude prednáška

Mgr. Petra Náthera a  
doc. RNDr. Márie Markošovej, CSc.  
Katedra aplikovanej informatiky FMFI UK

## **Hierarchia v bezškálových sieťach**

### **Abstract**

It is known, that the network structure is intimately connected to the network dynamics. The same is true about the local network dynamics, which strongly influences the global network structure. Different dynamics leads to the different statistical properties, such as degree distribution or clustering coefficient distribution. Many networks in Nature combine scale free property (expressed in power law degree distribution) and node hierarchy (expressed in power law clustering coefficient distribution). It can be shown analytically, that the scale free property is a result of the preferential node linking, but there is no such true known about the hierarchy. Here we present a model with dynamics leading to the scale free and hierarchical resulting network structure.

Ján Šefránek

Vladimír Kvasnička

web stránka:

[http://www2.fiit.stuba.sk/~kvasnicka/Seminar\\_of\\_AI](http://www2.fiit.stuba.sk/~kvasnicka/Seminar_of_AI)