

# TALK ANNOUNCEMENT

**Seminar Series:** The Science of Complex Networks (description below)

**Speaker:** Reinhard Laubenbacher, Applied Discrete Mathematics Group, VBI and the Department of Mathematics, Virginia Tech.

**Title:** Discrete Models for Complex Systems.

**Abstract:** Please see below.

**Date & Time:** Wednesday, November 16, 2005. 4:00-5:00 PM

**Location:** CRC, Building XV, Conference room 2018

**Web:** <http://ndssl.vbi.vt.edu/seminars>

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## Abstract

This talk will provide an introduction to mathematical approaches to the study of complex systems. Applications to the modeling and simulation of biological networks will also be discussed. The talk is suitable for a general (nonmathematical) audience.

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## Seminar Series: "The Science of Complex Networks"

A new seminar series titled "The Science of Complex Networks" is being started. It is organized by the group NDSSL at VBI, on the web at <http://ndssl.vbi.vt.edu>. The theme of the seminar is mathematical and computational aspects of dynamics over large graphs. Examples include the dynamics on networks in communication, urban traffic systems, and networks arising in biological systems such as the molecular networks in the genome and the immune system.

The systems and network models that come from these various areas describe very different phenomena and dynamics and may seem to have little in common. Contrary to this intuition, there are large classes of models with fundamental similarities in both structure and dynamics. This common and generic structure has already motivated research, and is an extremely active area of current research.

The seminars will have a formal flavor, and at least proof ideas and outlines will be encouraged. Presentations of experimental data and findings displaying interesting phenomena that point to possible general results are also welcome.