

*the evolution of*

# COMPLEX SYSTEMS



**Thursday, October 13**

**MELANIE MOSES**

**7:00 p.m., ARTS 150**

*2011 Fall Lecture Series*

## “Network Scaling:

### How size determines the growth and behavior of organisms and societies”



Scaling properties of networks that deliver energy and information within industrial societies can affect the behavior of people living in those societies. Scaling theory offers the perspective that human life spans, reproductive choices, and economic structures may be constrained by the way that energy flows through networks in modern societies.

Dr. Moses is an Assistant Professor in the Department of Computer Science at the University of New Mexico, with a joint appointment to the Department of Biology. She concentrates on scaling properties of biological, social, and information networks, and the general rules governing the acquisition and efficiency of energy and information exchanges in complex adaptive systems.

*Complex Systems is co-sponsored by Undergraduate Research, College of Arts and Sciences, and the UAA Honors College*

3211 Providence Dr, Anchorage, AK 99508 Tel 907.786.4748 [www.uaa.alaska.edu/complexsystems](http://www.uaa.alaska.edu/complexsystems)

UNIVERSITY of ALASKA ANCHORAGE