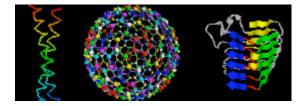**MIT**
**Department of Mathematics**
**& The Theory of**
**Computation Group**
**At CSAIL**

# Bioinformatics Seminar

Speaker: Golan Yona, Department of Computer Science
Technion, Israel
Title: Mapping the protein space: From novel system
topologies to semantically significant domain architectures
and functional maps of the protein space.
Date: Monday, 17 October 2005
Time & Location:
Refreshments: 11 am in the Theory of Computation Lab at MIT's
Building 32, Stata Center Room G-575
Talk: 11:30 am the Theory of Computation Lab at MIT's Building 32,
Stata Center, Room G-575
URL: http://www-math.mit.edu/compbiosem/

Abstract:

In this talk I will present some of the elements that make up our long-term project
to chart the protein space.

In the first part of the talk I will present Biozon (biozon.org). an extensive
knowledge resource of heterogeneous biological data that holds more than 100
million biological documents and 6.5 billion relations.  Biozon supports complex
and fuzzy searches and also integrates first-of-a-kind biological ranking system
which resembles the methods implemented in Google.

The rest of the talk will be devoted to the algorithms and models that we have
developed for detection of domains and semantically significant domain
architectures, new similarity measures between proteins and protein families, and
novel embedding techniques that we have developed and are used to construct a
complete "road map" of the protein universe.

For more information see http://biozon.org and  http://www.cs.cornell.edu/golan

The seminar is co-hosted by Professor Peter Clote of Boston College's Biology and Computer Science
Departments and MIT Professor of Applied Math Bonnie Berger. Professor Berger is also affiliated with CSAIL &
HST.

Massachusetts Institute
of Technology
77 Massachusetts Avenue
Cambridge, MA 02139

*For General Questions, please contact kvdickey@mit.edu*