

September 21, 2012  
9:30 a.m. - 5:30 p.m.  
Bissinger Room  
4th floor, Howe Center  
Stevens Institute of Technology  
Hoboken, NJ

September 22, 2012  
9:00 a.m. - 5:45 p.m.  
Room C002  
Hunter North Building  
Hunter College (CUNY)  
New York, NY

Url: <http://www.stevens.edu/algebraic/GTH/>

# Group Theory on the Hudson

---

**Alexei Miasnikov**

*(Stevens Institute of Technology, NJ)*

**“Definable sets in free and hyperbolic groups”**

## Abstract:

I will talk about algebraic structure of definable sets in a free or a torsion-free hyperbolic group  $G$ . Recall, that a subset of  $n$ -tuples in  $G$  is definable if it is the truth set in  $G$  of some first-order formula with  $n$  free variables. In our joint work with Olga Kharlampovich we give a natural description of definable sets in  $G$ , which allows us to solve several old open problems.

