

# Topology Seminar

**Roman Mikhailov**

of Steklov Mathematical Institute and Institute for Advanced Study  
will be speaking on

## A combinatorial description of homotopy groups of spheres

on February 13 at 4:30 in  
MIT Room 2-131

The talk is based on recent results obtained jointly with Jie Wu. For all  $n > k$ , we construct a finitely generated group by explicit generators and relations such that its center is the  $n$ -th homotopy group of the  $k$ -th sphere.