## Lightning Research Talk

## Deeparaj Bhat

Program Associate, Gauge Theory Program, SLMath (formerly MSRI) Graduate Student, Massachusetts Institute of Technology

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## Research Description

- Instanton Floer theory and applications to low dimensional topology.
- ► Topics I am thinking about:
  - 1. Relating instanton floer theory of knots and 3-manifolds.
  - 2. Computing knot instanton homology from their sutured counterparts.
  - Better understand the structure of knot instanton floer groups, e.g. an intrinsic definition of Alexander grading.
  - 4. Find analogues of results from SU(2) instanton floer theory for SU(n).

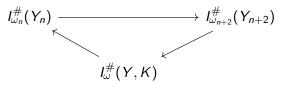


Figure: [B., in progress]