1100-20-1 Nir Avni* (avni.nir@gmail.com). Special values of representation zeta functions. I will talk about connections between:

- 1. Counting representations of arithmetic lattices (for example, $SL_n(\mathbb{Z})$).
- 2. Distribution of commutators in some compact groups (for example, $SL_n(\mathbb{Z}_p)$.
- 3. The singularities of (complex) character varieties (for example, the variety $Hom(\pi_1(\Sigma), SL_n(\mathbb{C}))/SL_n(\mathbb{C})$). (Received May 17, 2013)