

## Mathematical Physics Seminar, Ivan Karpov, MIT

Thursday, Feb 16th 2:30 – 3:30pm, SCHM 302

**\*\*\*Please not unusual time and date\*\*\***

**Title:** Nonlinear SRA

**Abstract:** Let  $G$  be a finite subgroup of  $\mathrm{Sp}(V)$  for  $V$  being a symplectic vector space.

A symplectic reflection algebra  $H(V, G, c)$  is, by definition, an unobstructed deformation of the smash product of  $G$  with the Weyl algebra  $W(V)$ .

Etingof and Dolgushev (2005) have conjectured an existence of the similar deformation in the case of  $V$  being a general smooth affine symplectic variety.

We will prove their conjecture using the results of Losev, Bezrukavnikov-Kaledin, Namikawa, et al.; — and discuss the similar statement for  $V/G$  replaced by an arbitrary symplectic singularity. This is a joint work with P. Etingof and A. Vitanov.