## BLACK HOLES IN DENSE STAR CLUSTERS Aspen Center for Physics 2015 Aspen Winter Conference January 17–22, 2015

TITLE: Co-evolution of Central Black Holes and Nuclear Star Clusters

SPEAKER: Oleg Gnedin (U Michigan)

I will discuss possible mechanisms of growth of nuclear star clusters, including inspiral of globular clusters and in-situ star formation. A fraction of the mass should remain available for feeding a central black hole. This mass is more likely to be in the form of colliding stars in thre case of low-mass galaxies, and in the form of dense gas clouds in the case of very massive galaxies.