

Meeting: 1000, Albuquerque, New Mexico, SS 2A, Special Session on Several Complex Variables and CR Geometry

1000-32-98 **Laszlo Lempert*** (lempert@math.purdue.edu), Dept. of Mathematics, Purdue University, 150N University Street, West Lafayette, IN 47907. *Ideal sheaves in Banach spaces*. Preliminary report.

If S is an analytic subset of a finite dimensional complex Euclidean space, then the sheaf J of holomorphic functions vanishing on S is a coherent analytic sheaf. Therefore Cartan's Theorems A and B apply: B says that higher cohomology groups with values in J vanish, while according to one version of A, sections of J over holomorphically convex compact sets can be approximated by global sections.

The talk will discuss whether these results generalize to analytic subsets of Banach spaces. (Received August 19, 2004)