

1145-46-2714

**Swarup N. Ghosh\*** ([swarup.ghosh@swosu.edu](mailto:swarup.ghosh@swosu.edu)), 100 Campus Drive, Weatherford, OK 73096. *A conjecture of Andrew Gleason for uniform algebras on smooth manifolds*. Preliminary report.

In 1957, Andrew Gleason conjectured that if  $A$  is a uniform algebra on its maximal ideal space  $X$  and every point of  $X$  is a one-point Gleason part for  $A$ , then  $A$  must contain all continuous functions on  $X$ . Gleason's conjecture was disproved by Brian Cole in 1968. In this talk, we will establish a strengthened form of Gleason's conjecture for uniform algebras generated by real-analytic functions on compact subsets of real-analytic three-dimensional manifolds. (Received September 25, 2018)