

**Meeting:** 998, Houston, Texas, SS 11A, Special Session on Algebraic Topology

998-55-340            **Jacob Mostovoy\*** ([jacob@matcuer.unam.mx](mailto:jacob@matcuer.unam.mx)), Instituto de Matematicas (UNAM), Unidad Cuernavaca, av. Universidad s/n, 62210 Cuernavaca, Morelos, Mexico. *Spaces of rational maps and the Stone-Weierstrass Theorem.*

G.Segal has shown that the space of complex rational functions in one variable gives a "topological approximation" to the space of all continuous maps from a 2-sphere to itself. We shall discuss a generalization of this result to spaces of maps between complex projective spaces. Our method is to treat the problem as a question from real rather than complex geometry and use the Stone-Weierstrass Theorem together with Vassiliev's simplicial resolutions. (Received March 01, 2004)