## 1030-15-333 Ali Godjali\* (godjali@math.wisc.edu), UW-Madison Mathematics Department, 480 Lincoln Drive, Madison, WI 53706. *Characterization of Tridiagonal Pair via Split Decomposition*.

Investigating the notion of the Q-polynomial property of association schemes, Terwilliger introduced a purely linear algebraic notion of Leonard pairs. Subsequently a lot of research has been done on the topic of Leonard pairs. My talk is about a mild generalization of the notion of Leonard pair which is called Tridiagonal pair. It is well known that Tridiagonal pairs induces split decompositions on its underlying vector space. We give a characterization of Tridiagonal pairs which involves the notion of the split decomposition. (Received August 06, 2007)