

# GRADUATE SEMINAR

## A STRUCTURED APPROACH TO CLASSIFICATION OF TOPOLOGICAL SPACES

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WEDNESDAY, MARCH 2, 2005 IN ROOM 331 AT 3:00 PM

♣Abstract: *Many classes of topological spaces may be described via properties of their neighborhood filters. I will provide a general scheme that stresses the common relationships between several classical topological spaces. I will also introduce a new product theorem that operates on these common relationships and allows one to discuss productivity of classes of filters whose bases are defined by a combination of both set theoretical and topological properties. This theorem seems to have consequences that are beyond that of generalized compactness.*