Analysis and Differential Geometry
Seminar

Characterization of Quasiconformal mapping, and extremal length decomposition and upper bound of QED constant for finitely connected domains

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Abstract: The talk includes two parts. For the first part, it is known that Conformal mapping preserves the measure of angle. The Quasiconformal mapping is a natural generalization of the conformal mapping. Some measure of angle named topological angle can be defined to characterize Quasiconformal mappings. I will discuss these results in higher dimension. For the second part, quasiextremal distance domains (QED) are a class of domains introduced by Gehring and Martio in connection with Quasiconformal mapping theories. I will discuss a decomposition theorem about the extremal length of a curve family within the finitely connected QED domain. Moreover, I will discuss the result of sharp upper bound for QED constant of finitely connected domain on the complex plane.

Tuesday, October 22, 2013, 4:00 pm
Mathematics and Science Center: W302

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