Analysis and Differential Geometry Seminar

Complex Dynamics of Rational Maps

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Abstract: We will look at the iteration of rational functions of one complex variable and study the behaviour of points in the complex sphere under such iterations. Such iterations split the plane into two sets, that of well-behaved and that of ill-behaved points known as the Fatou set and the Julia set respectively. The notion of equicontinuity will be used to formally define these two sets and we will relate this to normality as well. Properties of the Fatou and Julia sets will be looked at and topological consequences will be established as well.

Tuesday, December 6, 2022, 4:00 pm Mathematics and Science Center: MSC W301

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