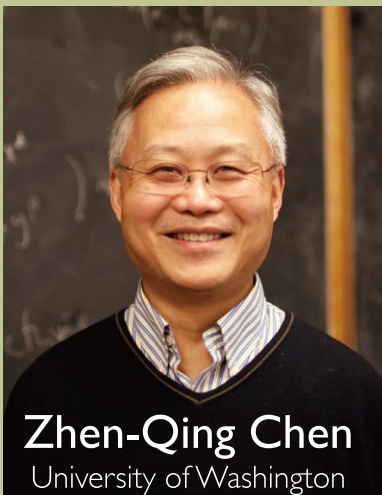


# Stochastic Komatu-Loewner Evolutions

**3.25 - 4.17, 2019**

Faculty of Science Bldg. #3, Kyoto University



Loewner equation is a differential equation for conformal mappings that can be used to describe evolution of a family of simply connected planar domains. It was introduced by C. Loewner in 1923 in his work on the Bieberbach conjecture. Oded Schramm observed and conjectured in 2000 that scaling limit of many two-dimensional lattice models in statistical physics can be described by Loewner evolutions with Brownian motions as the driving function. Many of these conjectures are latter confirmed in a series of joint work by G. Lawler, O. Schramm and W. Werner and by S. Smirnov.

On the other hand, Y. Komatu extended Loewner equation to circularly slit annuli in 1950 but in the left derivative sense. The aim of this series of lectures is to survey some recent progress in the study of Komatu-Loewner evolutions and its stochastic counterpart in the canonical slit domains, with emphasis on probabilistic methods.

Date	Time	Venue	Title
March 25 (Mon)	13:00-15:00	Rm 110	<i>Conformal mapping and Brownian motion with darning</i>
March 29 (Fri)	13:00-15:00	Rm 110	<i>Komatu-Loewner differential equations for multiply connected domains</i>
April 5 (Fri)	10:00-12:00	Rm 127	<i>Induced slit motions and Komatu-Loewner evolution</i>
April 12 (Fri)	13:00-15:00	Rm 127	<i>Stochastic Komatu-Loewner differential equation</i>
April 17 (Wed)	13:00-15:00	Rm 127	<i>SKLE and SLE</i>

◆ 本講義は単位対象外です。

