スーパーグローバル大学創成支援
**数学特別講義**

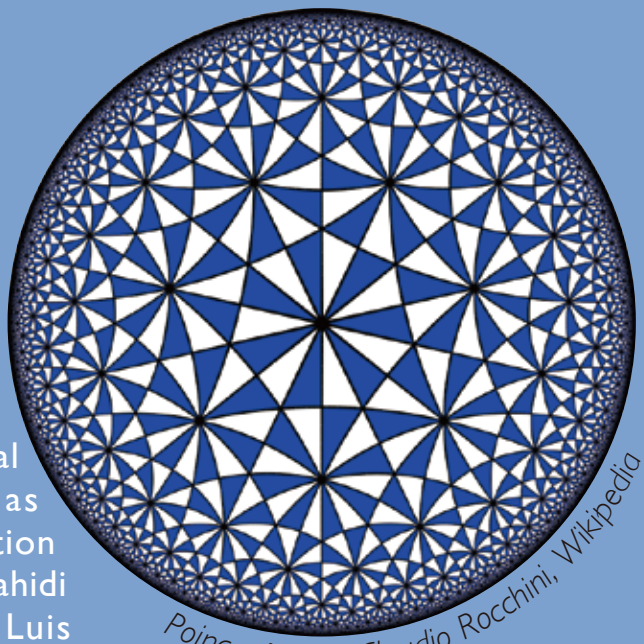
# Globalization of Supercuspidal Representations over Function Fields and Applications


Date : **Dec 8, 2015 - Jan 5, 2016**

Tuesday, December 8
Tuesday, December 15
Friday, December 18
Tuesday, December 22
Tuesday, January 5

Time : **15:00 - 17:00**

Venue : **127 Conference Room**
Faculty of Science Bldg. #3
Kyoto University



Poincaré disk , Claudio Rocchini, Wikipedia

I will describe how one can use Poincare series to construct cuspidal automorphic representations of connected reductive group over a global function field with a given supercuspidal local component and prescribed behavior (such as ramification) at all other places. This globalization result can be used to complete the Langlands-Shahidi theory over function fields (a recent result of Luis Lomeli). Combining this with the recent construction by Vincent Lafforgue of the global Langlands correspondence over function fields, one can prove stability of arbitrary Langland-Shahidi gamma factors and obtain the local Langlands correspondence for classical groups. I will discuss some of these applications and if time permits (for me to understand it), I will give a sketch of the Lafforgue's construction.

❖ 大学院の学生には１単位認定されます。

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