



**Speaker:** Seonhee Lim  
Seoul National University

Thursday, October 16, 2014  
2:00 PM  
125 Hayes-Healy Hall

**Title:** Subword complexity and Sturmian colorings of trees

**Abstract:**

Subword complexity for a vertex-coloring of a tree is the number of colored balls. We show that Sturmian colorings, i.e. those of minimal unbounded subword complexity, all come from colorings on a quotient graph which is a ray or a geodesic. We will further explain properties of the quotient colorings related to properties of Sturmian words. This is a joint work with Donghan Kim and partly with Seulbee Lee.