## 1049-13-147 Hidefumi Ohsugi\* (ohsugi@rkmath.rikkyo.ac.jp), College of Science, Rikkyo University, 3-34-1 Nishi-Ikebukuro, Toshima-ku, Tokyo, 171-8501, Japan. Toric ideals of nested configurations.

This is a joint work with Satoshi Aoki, Takayuki Hibi and Akimichi Takemura. Segre product and Veronese subring are important operations to study semigroup rings. We introduce the notion of nested configurations which is a generalization of these operations. In particular, Gröbner bases of toric ideals of nested configurations are studied. As an application, we discuss quadratic Grönber bases of toric ideals arising from certain convex polytopes. (Received March 02, 2009)