1116-39-2305 **Hidetaka Sakai***, Graduate School of Mathematical Sciences, The University of Tokyo, Komaba 3-8-1, Meguro-ku, Tokyo, 153-8914, Japan. *Discrete Painlevé equations.*

The discrete Painlevé equations, which are a discrete analog of the Painlevé differential equations, were constructed by the research group led by A. Ramani and B. Grammaticos. These equations are associated with rational surfaces that are similar to, but slightly different from, the rational elliptic surfaces. By using theory of rational surfaces, we can comprehend algebraic properties of the equations, such as symmetry, special solutions, and so on. In this talk, I would like to present a simple introduction of the relation between the discrete Painlevé equations and the surface theory. (Received September 22, 2015)