June 13 (Fri.) 14:00 – 15:00

Logarithmic Minimal Models, Critical Dense Polymers, Percolation and W-Extended Fusion Rules

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The logarithmic minimal models LM(p,p') with p, p' coprime are a family of Yang-Baxter integrable two-dimensional lattice models. The first members of this family are critical dense polymers LM(1,2) and critical percolation LM(2,3). The continuum scaling limit of these theories yield logarithmic conformal field theories characterized by the existence of reducible yet indecomposable representations of the Virasoro algebra or extended conformal algebra. In the extended W-algebra picture, LM(1,2) is identified with symplectic fermions. The representation content and fusion rules for polymers and percolation are presented in both the Virasoro and extended W-algebra pictures and their relationship explained.