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Ilpo Laine* (ilpo.laine@joensuu.fi), Department of Mathematics, University of Joensuu, P.O. Box 111, FI-80101 Joensuu, Finland. *Tropical Nevanlinna theory.*

In this talk, we shall consider a max-plus semi-ring structure in the real line, with $-\infty$ included, endowed with tropical addition, equivalent to the usual maximum operation, and tropical multiplication, equivalent to the usual addition. In this framework, tropical Nevanlinna theory describes value distribution of continuous piecewise linear functions of a real variable, whose one-sided derivatives are integers at every point. Such functions are called tropical meromorphic functions.

In this talk, we shortly describe tropical counterparts of the first main theorem, the lemma of logarithmic differences and the classical Clunie lemma.

This is a joint work with C.-C. Yang (Hong Kong University of Science and Technology). (Received January 13, 2009)