

Department of Mathematics and Statistics
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COLLOQUIUM

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Classical and Quantum W Algebras

Friday, October 26, 2007

4:15 p.m., ES 143

Tea at 3:45 p.m., ES 152

ABSTRACT

I will first introduce the notions of vertex algebra and Poisson vertex algebra, and the relation between them via the so called quasi-classical limit. I will then introduce the Zhu algebra of a vertex algebra, which controls its representations, both in the quantum and in the classical case. As a special case, I will consider the affine and finite W algebras, obtained by the method of quantum Hamiltonian reduction.