

An Introduction to CFT

String Theory Special Lecture Series

by

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Conformal field theory (CFT) is an important tool with many applications in mathematics and physics. Examples would be vertex algebras/moonshine, quantum groups, affine Lie algebras, and invariants of knots on the mathematics side, as well as percolation/random walks, critical systems, Kondo effect, quantum Hall states, and perturbative string theory on the physics side.

This series of lectures gives an introduction to CFT, with the application to string theory in mind. It is aimed at graduate students in theoretical physics or mathematics. The style will be more on the mathematical side; some background in quantum field theory is helpful, but not necessary.

Place:

Room 5280, Chamberlin Hall

Times:

Tue,	Aug. 31.,	2pm–4pm	CFT on the complex plane (part 1)
Thu,	Sep. 2.,	2pm–4pm	CFT on the complex plane (part 2)
Fri,	Sep. 3.,	10am–12am	Chiral conformal field theory
Tue,	Sep. 7.,	2pm–4pm	CFT on the upper half plane
Thu,	Sep. 9.,	2pm–4pm	CFT on surfaces of higher genus