CONFORMAL FIELD THEORIES AND A NEW GEOMETRY.

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ABSTRACT

I will start with a discussion on the impact of string theory on our understanding of geometry from a single angle, and then argue that conformal field theories (CFT) provide an entirely new algebraic geometry. Then I will review the vertex-operator-algebra approach towards open-closed CFT. In the rational cases, I will show that open-closed CFTs satisfying a strong boundary condition can be classified. Using this classification, I will discuss some basic properties of the new geometry such as Holographic Principle and a precise relation between dualities and invertible defects.

Please notice special time and day!
Tuesday, 6 September 2011
2:30 pm
Smith Hall 204
Tea and refreshments will be served at 2:15pm.

http://math.newark.rutgers.edu/~xiaowwan/Colloquium/