Einstein Metrics, Complex Surfaces, and Symplectic 4-Manifolds

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An Einstein metric is by definition a Riemannian metric of constant Ricci curvature. One would like to completely determine which smooth compact n-manifolds admit such metrics. In this talk, I will describe recent progress regarding the 4-dimensional case. These results specifically concern 4-manifolds that also happen to carry either a complex structure or a symplectic structure.

> 3:45 p.m. Math 520 Columbia University