

Семинар «Геометрические структуры на многообразиях»

Семинар состоится **12 декабря 2019 года**

Семинар пройдет в аудитории **306, Усачева 6. Начало в 18:30.**

Artem Galkin Complex Monge-Ampère equation and Aubin-Yau theorem

Recall that a Riemannian metric is Einstein, if its Ricci tensor is proportional to the metric. For a complex manifold with trivial first Chern class, the Yau theorem asserts that every Kähler class contains a Kähler-Einstein metric (which is necessarily Ricci flat). The case $c_1 > 0$ is still open, whereas in the case $c_1 < 0$ Aubin-Yau theorem implies the existence of Kähler-Einstein metric. Naturally these arguments rely on the machinery of PDEs, appearing as an existence and uniqueness theorem for the solutions of the Monge-Ampère type equations. In the talk I will briefly present the outline of the proofs and explain the ideas of Moser iteration method and continuity theorem.