Department of Mathematics, BGU

Colloquium

On *Tuesday, June ,6 2023*

At *14:30 – 15:30*

In *Math 101-*

Misha Verbitsky (IMPA)

will talk about

Teichmuller spaces for geometric structures and the mapping class group action

Abstract: The Teichmuller space of geometric structures of a given type is a quotient of the (generally, infinite-dimensional) space of geometric structures by the group of isotopies, that is, by the connected component of the dffieomorphism group. In several important qand smooth.uestions, such as for symplectic, hyperkahler, Calabi-Yau, G2 structures, this quotient is finite-dimenisional and even smooth. The mapping class group acts on the Teichmuller space by natural dffieomorphisms, and this action is in many important situations ergodic (in particular, it has dense orbits), bringing strong consequences for the geometry. I would describe the Teichmuller space for the best understood cases, such as symplectic and hyperkahler manfiolds, and give a few geometric applications.