

# Topology, Algebraic Geometry, & Dynamics Seminar

## Riemannian foliations and geometric quantization

**Yiannis Loizides**  
George Mason

One can attempt to generalize various definitions/theorems in differential geometry to the leaf-spaces of foliations by studying geometric structures transverse to the leaves of the foliation. I will explain examples of this from symplectic geometry: symplectic reduction for transverse Hamiltonian actions and geometric quantization using transversely elliptic operators. Along the way there will be a crash course on Molino's theory of Riemannian foliations. This talk is on joint work with Lin, Sjamaar and Song.

Date: **Friday, the 13<sup>th</sup> 2023**

Time: **1:30-2:30 pm**

Place: **EXPLR L111**

For special accommodations, please contact David Carchedi via email at [dcarched@gmu.edu](mailto:dcarched@gmu.edu).