Abstract Submitted
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**Geometric Defects in Quantum Hall States**[1] ANDREY GROMOV, University of Chicago — I will describe a geometric analogue of Laughlin quasiholes in fractional quantum Hall (FQH) states. These "quasiholes" are generated by an insertion of quantized fluxes of curvature - which can be modeled by branch points of a certain Riemann surface - and, consequently, are related to genons. Unlike quasiholes, the genons are not excitations, but extrinsic defects. Fusion of genons describes the response of an FQH state to a process that changes (effective) topology of the physical space. These defects are abelian for IQH states and non-abelian for FQH states. I will explain how to calculate an electric charge, geometric spin and adiabatic mutual statistics of the these defects.

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