

BOSTON UNIVERSITY GEOMETRY SEMINAR

A duality of étale gerbes

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Tea 2:45-3 in MCS 153

Abstract: Let G be a finite group. A G -gerbe over a base space B can be roughly understood as a principal BG bundle Y over B , where BG is the classifying orbifold of the group G . Given a G -gerbe Y over B , one can naturally construct a disconnected space \hat{Y} and a flat $U(1)$ -gerbe c on \hat{Y} . Physicists have conjectured that the geometry of the G -gerbe Y is equivalent to the geometry of \hat{Y} twisted by the $U(1)$ -gerbe c . In this talk we'll explain some mathematical aspects of this conjecture, including non-commutative geometry and symplectic topology.