1108-53-292   **Renato G. Bettiol*** (`rbettiol@nd.edu`), University of Notre Dame, Department of Mathematics, 255 Hurley Building, Notre Dame, IN 46617. *On 4-manifolds with positive biorthogonal curvature.*

A 4-manifold is said to have positive biorthogonal curvature if the average of the sectional curvatures of orthogonal planes is positive. In this talk, I will describe a construction of metrics with positive biorthogonal curvature on the product of spheres, and apply surgery techniques due to Hoelzel to classify (up to homeomorphism) the closed simply-connected 4-manifolds that admit a metric with positive biorthogonal curvature. (Received January 16, 2015)