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Chi Hin Chan, Magdalena Czubak* (magda.czubak@colorado.edu) and **Marcelo M Disconzi**. *The formulation of the Navier-Stokes Equations on the Riemannian manifolds.*

There are inequivalent formulations of the Navier-Stokes equations on the Riemannian manifolds due to the different possibilities for the Laplacian operator acting on vector fields. In this talk, we present several distinct arguments that indicate that the form of the equations proposed by Ebin and Marsden in 1970 should be adopted as the correct generalization of the Navier-Stokes to the Riemannian manifolds. (Received August 30, 2016)