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Hakima Bessaih* (bessaih@uwyo.edu), Department of Mathematics & Statistics, Laramie, WY 82071, and **Annie Millet**. *Space-time numerical schemes for the 2d Stochastic Navier-Stokes equations*. Preliminary report.

We consider space-time discretization schemes for the 2d stochastic Navier-Stokes equations driven by a multiplicative Brownian noise. We prove a mean square rate of convergence. This refines previous results established with a rate of convergence in probability only. The method is based on using exponential moment estimates and localized moment estimates of the solution of the Navier-Stokes equations, When the noise is additive, some new results are described without using the localization procedure. (Received January 18, 2021)