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C DENG* (dengxznu@gmail.com) and **X Yao** (yaoxiaohua@ccnu.edu.cn), , Peoples Rep of China. *Well-posedness for the 3D generalized Navier-Stokes equations in the Triebel-Lizorkin space framework.*

In this paper, we study the well-posedness result for the 3D generalized Navier-Stokes equations (gNS) by establishing a new time-space type $L_p(dx)$ - $L_q(dt)$ bilinear estimate. Combining the key bilinear estimate, we also prove ill-posedness of this gNS. (Received February 18, 2013)