1164-49-38 **Sergio Mayorga*** (sergio_mayorgatatari@baylor.edu), 1410 S 4th St, Sid Richardson Building, Of. 328, Waco, TX 76706, and **Jameson Graber** (jameson_graber@baylor.edu), 1410 S 4th St, Sid Richardson Building, Of. 320, Waco, TX 76706. *Mild equilibrium of constrained mean field games of controls.* Preliminary report.

Mean field games (MFGs) with state constraints pose a fine challenge of their own because state-constrained solutions to Hamilton-Jacobi-Bellman equations don't offer enough regularity that is required in the continuity equation that is coupled with the HJB equation in the MFG system. A relaxed version of MFG equilibrium (called a "mild solution") has been developed by Cannarsa et. al. We are interested in mean field games of controls, where player's actions depend not only on others' states but strategies. Such games with state constraints arise naturally in economics. We intend to apply the mild solution idea to this setting.

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