1135-35-1726   **Hantaek Bae**, **Elaine Cozzi**, **Gung-Min Gie** and **James P Kelliher***
                    (`kelliher@math.ucr.edu`). *Techniques of 2D fluids applied to the aggregation equation.*

The viscous and inviscid aggregation equation with Newtonian potential models a number of different physical systems and has close analogs in 2D incompressible fluid mechanics. We give an overview of how techniques from 2D fluid mechanics can be adapted to analyze both the viscous and inviscid aggregation equation, including well-posedness, the inviscid limit, and the propagation of striated regularity. (Received September 24, 2017)