Title: Decomposition of functions and solutions
Speaker: Dr. Fernando Lopez-Garcia, UC Riverside
Date: Wednesday May 24th, 2017
Time and Location: 1:00-1:50pm in 3-1616

Abstract: The variational analysis of the Stokes equations, which model the displacement of a viscous incompressible fluid, is based on the existence of solutions of the equation div u= f. In this talk, we will review the explicit solution proposed by Bogovskii in 1979 on star-shaped domains, which uses singular integral operators. Next, we will deduce a local-to-global method, based on decomposition of functions, to extend the result by Bogovskii to a more general class of domains and weights.