

The Compressible Porous media Equation: Local and non local

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Abstract:

I will briefly review the regularity of solutions and free boundaries for the local (infinitesimal) porous media equation) and then discuss the cases where the pressure is a potential of the density and also when memory, through an integral time derivative of fractional order, is present (this is joint work with Juan Luis Vazquez and with Mark Allen and Alexis Vasseur)