Functions of least $W^{s,1}$–fractional seminorm

We discuss some properties of minimizers of the $W^{s,1}$–fractional seminorm, that reflect those enjoyed by *functions of least gradient*, their classical counterparts. In particular, we investigate the connection between these minimizers and nonlocal minimal sets and take advantage of this connection to show existence of *functions of least $W^{s,1}$–seminorm*. We further reason about existence of minimizers and weak solutions by considering the asymptotics as $p \to 1$ of the $W^{s,p}$-fractional seminorm and of its Euler-Lagrange equation. The results presented are obtained in collaboration with S. Dipierro, L. Lombardini, J. Mazón and E. Valdinoci.