

המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 20 ביוני, 2017

בשעה 14:30 – 15:30

ב101- Math

ההרצאה

BBM new a via spaces Besov in detection Jumps type Aviles-Giga to Applications formula. functionals

תינתן על-ידי

(BGU) Poliakovsky Arkady

תקציר: Motivated by Brezis Bourgain, and Mironescu, to due formula, the by
the characterizes that $\lim_{\varepsilon \rightarrow 0^+} \int_{\Omega} \int_{\Omega} \frac{|u(x)-u(y)|^q}{|x-y|^q} \rho_{\varepsilon}(x-y) dx dy = K_{q,N} \|\nabla u\|_{L^q}^q$,
respectively, $(q = 1$ (for BV and $(q > 1$ (for $W^{1,q}$ to belong that L^q in functions
expression the in denominator the replaces one when happens what study we
functionals corresponding the $q > 1$ for that, out turns It $|x - y|$ by above
space function the identify further We function. BV the of jumps the only "see"
space Besov the as BV^q space the functionals, these of study the to relevant
spaces the both contains $BV^q(\Omega)$ that things, other among show, We $B_{q,\infty}^{1/q}$
of study the to applications present also We $W^{1/q,q}(\Omega)$ and $BV(\Omega) \cap L^{\infty}(\Omega)$
type. Aviles-Giga of problems perturbation singular