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- : **Flavia Giannetti** (Universit\`a degli Studi di Napoli Federico II)
  - : Some regularity properties for minimizers of non autonomous functionals with nonstandard growth conditions
  - : 29 3 21 15:00– 16:00

I will talk about some regularity properties of the local minimizers of integral functionals of the type \[\int_{\Omega}\Phi[1]$ is uniformly continuous. I will also discuss the more general case of integral functionals whose integrand exhibits the dependence on the x variable both in the coefficients and in the exponent. More precisely, I will deal with the regularity properties of the local minimizers of integral functionals of the type \[\int_{\Omega}\Phi^{p(x)}((A_{ij}^{\alpha\beta}(x,u)D_iu^{\alpha}D_ju^{\beta})^{1/2})\,dx, \] where $p(x):\Omega\to(1,+\infty)$ is a continuous function. All the results I will show are contained in two recent papers in collaboration with Antonia Passarelli di Napoli, Maria Alessandra Ragusa and Atsushi Tachikawa.

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5 images

[1]
A_{ij}^{\alpha\beta}(x,u)D_iu^{\alpha}D_ju^{\beta})^{1/2})\,dx,\] where $\Omega\subset \mathbb{R}^n$ is a bounded domain, $u:\Omega\to\mathbb{R}^N$, $n,N\geq 2$, Φ is an Orlicz function satisfying both the Δ_2 and ∇_2 conditions and the function $A(x,s)=(A_{ij}^{\alpha\beta}(x,s