DECOMPOSITION LEMMAS APPLIED TO MINIMIZATION PROBLEMS

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Abstract. Decomposition lemmas have already shown their efficiency in order to establish the existence of minimizers (or ground state solutions). We shall present in this talk, after introducing the background related to the subject, a new decomposition lemma for domains with nonempty boundary. Finally, we shall apply this lemma to minimization problems involving Hardy-Sobolev type inequalities on a specific class of unbounded domains.

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