SUBCRITICAL GROWTH APPEARS TO BE A CONTEXT FOR A REAL CHALLENGE ON QUASICONVEXITY

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The talk deals with some properties of quasiconvex functions, in the Charles Morrey's and John Ball's sense. In particular we deal with lower semicontinuity, existence and regularity - partial and everywhere regularity - of minimizers of convex and quasiconvex energy integrals under p,q-growth conditions. Motivated by a model energy integral relevant in nonlinear elasticity, we point out the interest to study lower semicontinuity and relaxation in the context of subcritical growth. Subcritical growth appears to be a context for a real challenge on quasiconvexity. This is a topic on which Jan Kristensen, to whom this seminar is dedicated, has made important scientific contributions.