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Characterization through scalarization  
of a new notion of quasi efficiency in  
multiobjective optimization<sup>\*</sup>

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**Abstract**

We introduce some new notions of quasi efficiency and quasi proper efficiency for multiobjective optimization problems that reduce to the most important concepts of approximate and quasi efficient solutions given up to now. We establish main properties and provide characterizations for these solutions by linear and nonlinear scalarizations.

**Keywords.** Multiobjective optimization, quasi efficiency, quasi proper efficiency, optimality conditions

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