Locally conformally product structures

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An LCP manifold is a quotient of a simply connected Riemannian manifold with reducible holonomy by a discrete co-compact group of homotheties, not all of which being isometries. LCP manifolds are compact but do not carry a natural Riemannian metric. Instead, they are endowed with a conformal structure, and a locally metric connection with reducible holonomy. We will discuss their basic properties, with emphasis on the analogy with LCK manifolds, and explain the classification of low-dimensional LCP solvmanifolds. The talk is based on joint work with Adrian Andrada and Viviana del Barco.