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Title: Calabi-Yau locally conformally Kähler manifolds.

Abstract: We discuss in this talk compact locally conformally Kähler (lcK) manifolds which are Calabi-Yau, in the sense they have vanishing first Bott-Chern class. We shall prove that an lcK Chern-Ricci flat metric that is Gauduchon is necessarily Vaisman and that all known examples of lcK manifolds of non-Vaisman type cannot be Calabi-Yau. Finally, we characterize lcK solvmanifolds that are Calabi-Yau.