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Tommy Murphy* (tmurphy@fullerton.edu), Dept. of Mathematics, California State University at Fullerton, 800 N State College Blvd., Fullerton, CA 92831. *Complex Riemannian foliations of Hermitian locally symmetric spaces.*

Given a Riemannian manifold, a natural problem is to classify the Riemannian foliations whose leaves satisfy natural geometric properties with respect to the metric. Our interest in this question lies in classifying the Riemannian foliations of a Kähler manifold with complex leaves. Such foliations are important in twistor theory and nearly Kähler geometry. The main theorem is a complete answer to this question for the first natural family of Kähler manifolds, namely the Hermitian locally symmetric spaces of compact type. General theorems which help us deduce results for Hermitian locally symmetric spaces of non-compact type will also be outlined. This is joint with Paul-Andi Nagy. (Received August 26, 2014)