1037-58-52 **Tatyana Foth*** (`tfoth@uwo.ca`), Department of Mathematics, University of Western Ontario, MC, room 125, London, Ontario N6A 5B7, Canada. *Complex submanifolds, connections, and the semiclassical limit.*

Let X be a connected compact n-dimensional Kahler manifold (n>1), with an integral Kahler form w. Let L be a holomorphic Hermitian line bundle on X, with the first Chern class represented by w. Let Y -> S be a complex analytic family of compact complex submanifolds of X. We study asymptotics of curvature of two natural connections in certain line bundles on S. (Received January 17, 2008)

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