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Peter Topalov* (p.topalov@neu.edu), Northeastern University, 360 Huntington Avenue, Boston, MA 02115, and Kazuyoshi Kiyohara. On Liouville integrability of h-projectively equivalent Kahler metrics. Preliminary report.

Under a non-degeneracy condition we classify the compact connected Kahler manifolds admitting pairs of holomorphically projectively equivalent metrics. Any such manifold is biholomorphically equivalent to $\mathbb{C}P^n$ and has completely integrable geodesic flow. (Received August 30, 2009)