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**Peter Ebenfelt\*** (pebenfelt@ucsd.edu), Department of Mathematics, La Jolla, CA 92093. *Local Holomorphic Isometries of a Modified Projective Space into a Standard Projective Space*. Preliminary report.

We consider local modifications  $\omega_n + f^*\omega_d$  of the Fubini-Study metric (with associated  $(1, 1)$ -form  $\omega_n$ ) on an open subset  $\Omega \subset \mathbb{P}^n$  induced by a local holomorphic mapping  $f: \Omega \rightarrow \mathbb{P}^d$ . Our main result is that there are "gaps" in potential dimensions  $m$  such that the modification can be obtained as  $h^*\omega_m$  for some local holomorphic mapping  $h: \Omega \rightarrow \mathbb{P}^m$ . We also consider the case of rational conformal factors. (Received January 20, 2015)