Robert J Stanton* (stanton@math.ohio-state.edu), Ohio State University, Department of Mathematics, 231 W. 18th Ave, Columbus, OH 43210. Proportionality at the level of heat operators.

Let X be a compact locally symmetric Hermitian manifold and M the corresponding compact symmetric space. Let E_{λ} (resp. V_{λ}) be an associated Hermitian vector bundle on X (resp. M). We shall relate a specific combination of traces of heat operators associated to E_{λ} to those for V_{λ} . The combination of traces of heat operators that are considered are those used to compute the holomorphic torsion associated to E_{λ} and V_{λ} . This is in collaboration with H. Moscovici. (Received February 14, 2006)