Gangotryi Sorcar*, sorcar@math.binghamton.edu. Non-contractibility of the Teichmüller space of negatively curved metrics on certain non-locally symmetric negatively curved manifolds. Preliminary report.

My results concern certain manifolds $M$ that are not hyperbolic, but support Riemannian metrics of negative curvature (Gromov-Thurston branched covers), in other words manifolds that do not have the homotopy type of a locally symmetric space and prove that $\mathcal{T}^\infty(M)$ is non contractible by constructing a non trivial element in $\pi_1(\mathcal{T}^\infty(M))$, where $\mathcal{T}^\infty(M)$ denotes the Teichmüller space of all negatively curved Riemannian metrics on $M$, which is the quotient space of the space of all negatively curved Riemannian metrics on $M$ modulo the space of all isotopies of $M$ that are homotopic to the identity. (Received September 17, 2013)