

**A q -ANALOGUE FOR EULER'S EVALUATIONS OF THE
RIEMANN ZETA FUNCTION**

ANKUSH GOSWAMI

ABSTRACT. In this talk, I will provide a q -analogue of Euler's formula for $\zeta(2k)$ for $k \in \mathbb{Z}^+$. The result generalizes a recent result of Z.W. Sun who obtained q -analogues of $\zeta(2) = \pi^2/6$ and $\zeta(4) = \pi^4/90$. We will also point out the recent work of Dawsey-Ono who obtained evaluations of the series we obtained at CM-points.

RESEARCH INSTITUTE FOR SYMBOLIC COMPUTATION (RISC), JKU, HAGENBERG
Email address: `agoswami@risc.jku.at`