

1125-AB-2319 **Min Lee*** (min.lee@bristol.ac.uk), Howard House, Queen's Avenue, Bristol, BS8 1SD, United Kingdom, and **Andrew R Booker** and **Andreas Strömbergsson**. *Numerical Computations with the Selberg trace formula.*

Ten years ago A. Strömbergsson and A. Booker worked out many explicit examples of the Selberg trace formula for square-free levels and have improved the evidence in favour of Selberg's eigenvalue conjecture. This approach should be expanded to the general levels. Based on the detailed notes on the Selberg trace formula by Strömbergsson, Booker, Strömbergsson and I are investigating the Selberg trace formula for general levels numerically. We will also discuss a couple of applications. (Received September 20, 2016)