MSRI–Evans Talk

May 1   **James Arthur**, University of Toronto, AMS President
Harmonic Analysis in Mathematics

Harmonic analysis can be interpreted broadly as a general principle that relates geometric objects and spectral objects. The two kinds of objects are sometimes connected by explicit formulas, and sometimes by parallel theories. I shall give an elementary introduction to this principle, with illustrations from different areas of mathematics. I shall then relate it with the Langlands program, a grand scheme for unifying some of the most fundamental arithmetic concepts of mathematics.

The talk is intended to be a semi-public lecture. In other words, I shall try to emphasize the broad ideas at the expense of technical details.