1056-H1-1140   **Clemency J Montelle*** (`c.montelle@math.canterbury.ac.nz`), Department of Mathematics and Statistics, University of Canterbury, Private Bag 4800, Christchurch, 8140, New Zealand.

Rip-off or Reverence? Hypsicles of Alexandria and the fourteenth book of the Euclid's Elements.

One cannot be entirely sure what was on the mind of Alexandrian Mathematician Hypsicles (fl. ca. 150 BCE (?)) when he named a work he wrote 'Book Fourteen of Euclid's Elements'. This book contains a detailed study on the comparison between a dodecahedron and an icosahedron inscribed in the same sphere in eight propositions and various lemmas. Did Hypsicles really hope that his readers would consider it a natural and essential continuation of the Elements, or was it intended simply to be an inspired complement of the work which was, even by his time, famous? Indeed, Hypsicles's presentation is unmistakably Euclidean in style but with some vital differences. This talk will cover some highlights of the detailed textual, technical, and contextual study of the mathematical content of his work I am carrying out, and from this, detect Hypsicles's motivations to title his work as such and what it reveals about the broader mathematical climate of his time. (Received September 21, 2009)