

## Bilkent University Department of Mathematics

## PROBLEM OF THE MONTH

**Term:** May 2010

Let a, b and c be positive real numbers and s = abc. Find the minimal number L satisfying

$$\frac{a^3-s}{2a^3+s} + \frac{b^3-s}{2b^3+s} + \frac{c^3-s}{2c^3+s} \le L$$