



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: May 2013

Suppose that for all nonnegative a, b, c satisfying $a + b + c = 1$ the inequality

$$\frac{a^2 + b^2 + c^2 + \frac{3}{4}abc}{ab + bc + ca} \geq T$$

is held. What is the maximal possible value of T ?