Bilkent University
Department of Mathematics

Problem Of The Month

Term: November 2020

Suppose that positive real numbers $a_{i,j}$, $i,j \in \{1,2,\ldots,2020\}$ for each pair (i,j) satisfy $a_{i,j}a_{j,i} = 1$. For each $i = 1,\ldots,2020$ let $c_i = \sum_{k=1}^{2020} a_{k,i}$. Find the maximal possible value of $\sum_{i=1}^{2020} \frac{1}{c_i}$.