

## Problem of the Week

Finishing date: 11/18/2016

Define the function $f:(0,+\infty) \rightarrow \mathbb{R}$ by

$$
f(x)=\left[\frac{1^{x}+2^{x}+\cdots+2016^{x}}{2016}\right]^{\frac{1}{x}} .
$$

Compute the limit

$$
\lim _{x \rightarrow 0^{+}} f(x) .
$$

Previous problem winners:
Randall Moreland (partial solution)

