

4CF17-2017-000029

Abstract for an Invited Paper  
for the 4CF17 Meeting of  
the American Physical Society

### **Next Questions In Neutrino Physics<sup>1</sup>**

MARK MESSIER, Indiana Univ - Bloomington

The discovery of neutrino mass in 1998 spawned a world-wide effort to better understand neutrino properties using neutrinos from the Sun, the atmosphere, reactors, and from accelerators. While much has been learned since then, several important questions remain: which neutrino is heaviest? Is there a symmetry in neutrino mixing? Do neutrinos break matter/antimatter symmetry? Is the framework we use to understand neutrinos complete or is there more? After introducing these questions, I will summarize recent progress by experiments operating around the world to answer them and look ahead at what might be learned at future facilities.

<sup>1</sup>Prof. Messier's work is supported by a grant from the Department of Energy's Office of Science