## Abstract Submitted for the MAR14 Meeting of The American Physical Society

The Sun is Condensed Matter and has a Real Surface PIERRE-MARIE ROBITAILLE, The Ohio State University — The idea that the Sun was a gaseous in nature was born from 1858-65. At that time, a group of men, including Herbert Spencer, Father Angelo Secchi, Warren de la Rue, Balfour Stewart, and Benjamin Loewy, advanced that the Sun was a ball of gas. In 1865, Hervé Faye was the first to argue that the solar surface was merely an illusion. Dismissing all signs to the contrary, solar physics has promoted this idea to the present day, as manifested by the Standard Solar Model. In this work, overwhelming observational evidence will be presented that the Sun does indeed possess a distinct surface (see P.M. Robitaille, Forty Lines of Evidence for Condensed Matter — The Sun on Trial: Liquid Metallic Hydrogen as a Solar Building Block, Progress in Physics, 2013, v. 4, 90-143). Our telescopes and satellites are sampling real structures on the surface of the Sun.

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Date submitted: 15 Nov 2013 Electronic form version 1.4