

Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

On segregation of noble gases in water-based Single Bubble Sonoluminescence MOGENS LEVINSEN, Niels Bohr Institute, Univ. of Copenhagen — A long-standing issue in the field of long time stable water based single bubble sonoluminescence has been the close similarity of the spectra to that of blackbody radiation. Looking for the effects of possible segregation of noble gases has been suggested as a means to investigate whether the similarity is just a weird coincidence with the bubbles being on the whole transparent to their own radiation. We have investigated spectra from bubbles seeded with various mixtures of helium and neon with xenon and argon using a novel transformation that allows for a single parameter characterization of the spectra, with the surprising result that although no trace of segregation is found, the radiation seems to be highly thermalized in all cases.

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Date submitted: 19 Nov 2010

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