Taleyarkhan *et al.* Reply: The Comment [1] has overlooked important aspects which result in incorrect conclusions.

Rather than argue about the merits or demerits of attempts at a computer code calculation for a "presumed experimental configuration and instrument settings-cum-performance," we directly obtained [2] additional experimental data with our laboratory's Cf-252 source with the same liquid scintillation and NaI detectors and settings used before [3,4]. We then show by direct one-on-one comparison in Fig. 1 that the reported spectra in our Letter [3,4] for neutron and γ photons are significantly different from corresponding spectra derived from a Cf-252 source. At the external detector face, D-D fusion (2.45 MeV) neutrons from our tests will not be monoenergetic due to down scattering with intervening atoms; hence, similar to neutrons from Cf-252, neutrons of various energies will reach the detector, the spectral shape of which is governed by complex 3D interactions with intervening media, detector train settings, age, etc. Cf-252 emits neutrons with an average energy of ~2 MeV [5], and superficial similarity with ~2.5 MeV down scattered neutrons should be expected, but this is *not* true for γ emissions. Importantly, our bubble fusion neutron spectrum [4] shown in Fig. 1(a) does display a (smeared) hump around the ~2.5 MeV proton-recoil-edge (PRE) [6] due to emitted neutrons being scattered downwards with atoms of test liquid and intervening ice packs and other paraffin shielding, along with γ photon leakage arising from the pulse-shape discrimination (PSD) settings [2,3] which permit ~7% of high energy photons to leak into the neutron window. Some (small) counts above the ~2.5 MeV PRE should be expected from γ leakage and U fissions. The Cf-252 neutron spectrum is distinctly separate, monotonic, and shows no hump. The γ spectrum for Cf-252 is even more radically different [Fig. 1(b)] with no resemblance (neither in structure nor intensity) with published spectra [3,4].

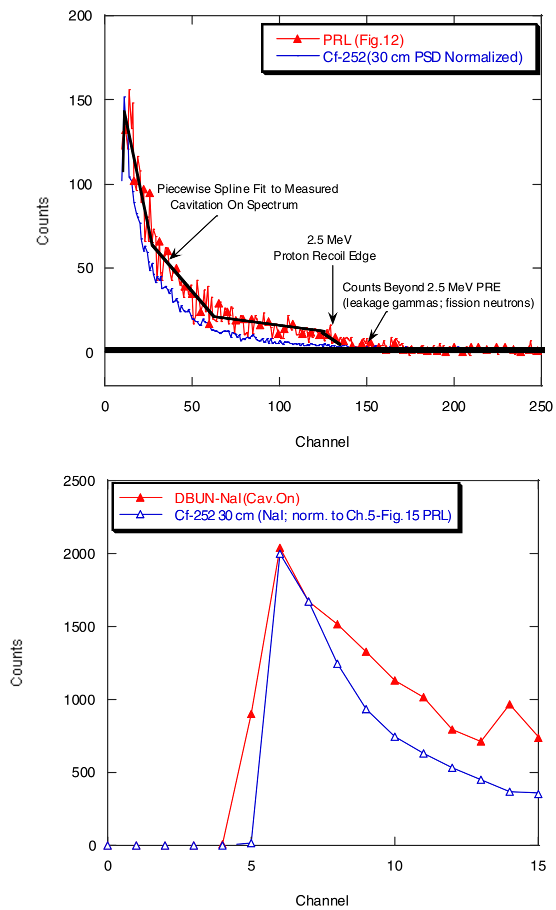

FIG. 1 (color online). (a) Measured neutron spectra for cavitation on [4] with hump ~2.5 MeV and for Cf-252 source (normalized at channel 10 to cavitation on spectrum). (b) Measured γ spectra for cavitation on [4] and for Cf-252 source (normalized at channel 5 to cavitation on spectrum).

Finally, the Comment [1] ignores the fact that a control experiment series has indeed been conducted using liquids with "H" bearing atoms with null results. Only deuterated benzene mixtures result in neutron emissions of ~17 to 30 standard deviations in statistical significance.

Our spectra [3,4] for neutron and γ emissions mixture could not have resulted from a Cf-252 source and are indeed consistent with that from a 2.45 MeV neutron source from within the test cell filled with C_3D_6-C_2Cl_4-C_3D_6O-UN.

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R. P. Taleyarkhan,[1] R. C. Block,[2] R. T. Lahey, Jr.,[2]
R. I. Nigmatulin,[3] and Y. Xu[1]
[1]Purdue University
West Lafayette, Indiana 47907, USA
[2]Rensselaer Polytechnic Institute
Troy, New York 12180, USA
[3]Russian Academy of Sciences
6 Karl Marx Street, Ufa 450000, Russia

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