**Belgiorno *et al.* Reply:** (1) We have shown that our experiments satisfy three of the conditions listed in the Comment by Schützhold and Unruh [1], (time independence, phase squeezing, negative energies).

(i) Time-independence: The authors of Ref. [1] point out that the surface gravity leads to a characteristic time with respect to which the perturbation must remain stationary. The surface gravity, as defined in Ref. [2], is of the order of $\kappa = c/(1\ \text{ps})$. This acceleration gives rise to a variation of the photon velocity of $dv = d(c/n) \sim (c/n^2)dn$. The time scale for this variation is therefore $dv/\kappa \sim 1$ fs, which is more than 3 orders of magnitude shorter than the time scale over which nearly stationary, filament-like propagation is observed.

(ii) Phase-divergence at the horizon: This has been shown to occur [2]. If we trace back in time the outgoing modes in the dispersionless case, we find that they suffer a phase divergence at the horizon with the same logarithmic nature as that pointed out by Hawking in his original work [2]. The phase divergence is maintained also in the dispersive case, albeit to a limited extent, in agreement with the behavior in other dispersive analogues.

(2) The authors of Ref. [1] introduce a condition for which particle creation will occur, namely, $\omega^{\text{pulse}}_{\text{frame}} = \omega^{\text{lab}}_{\text{frame}} - \mathbf{v}_{\text{pulse}} \cdot \mathbf{k}$. This condition simply implies that the presence of negative frequencies in the comoving reference frame leads to the generation of particles. This condition is so general that it also applies to Hawking radiation.

(3) The authors comment on the fact that "there is no exponential tearing (or compaction) by the horizon" because "...there is no group velocity horizon": Hawking emission occurs only with negative frequency output modes, i.e., $\omega^{\text{pulse}}_{\text{frame}} < 0$, which is clearly related to the existence of an horizon for the phase velocity of the output modes, as verified also by our experiments. Moreover, numerical simulations (to be presented in a future publication) clearly show that mode conversion occurs even in the absence of a group horizon for the *input* mode.

(4) Photon numbers: A calculation of the total photon number emitted by a 3D blackbody, as calculated in the comoving reference frame leads to an estimation that is indeed orders of magnitude lower than what is observed in the experiments. The large number of experimentally measured photons indicates a deviation with respect to the predictions for a static, spherically symmetric gravitational black hole which, in the different context presented in [3], is not surprising. This deviation possibly indicates the presence of additional "boundary" conditions (e.g., nontrivial emission and related blackbody geometry). We note that two very recent nonperturbative models for Hawking emission that include dispersion both predict photon numbers that are of the same order of magnitude [4] or higher than in the measurements [5]. The unfavorable $\delta n$ dependence is overcome by an increase or divergence in the emitted photons when the horizon condition is met.

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