Das and Vagenas Reply: We address the three points raised by the authors of the Comment (Ref. [1]).

(1) In our paper [2], we showed that, depending on the value of the generalized uncertainty principle (GUP) parameter β, a typical scanning tunneling microscopy (STM) could register an excess of one electron charge ($1e$) due to quantum gravity effects, in about a year. The authors of [1] claim that to actually be able to measure this effect, one would need to have a circuit with frequency $f \sim 10^{19}$ Hz. Their estimate appears to arise from the misunderstanding that one would need the accuracy to measure one electron charge in a current of 1 A (i.e., in 1 s), corresponding to an accuracy of 1 part in 10^{19}. We point out that this is not the case. One would simply need the apparatus to measure electric charge with an accuracy of $1e$, not in 1 s but in any reasonable amount of time, which can surely be done (and indeed has been possible since the time of Millikan [3]).

(2) Varying the standard expression for the STM current I (proportional to the transmission coefficient T) with respect to the gap a between the needle and sample (measurable currently to an accuracy of about 10^{-15} m), and together with Eq. (32) of our Letter [2], the authors of [1] claim that in effect $\delta I/I \approx 10^{-10}$. There seems to be at least two errors in this interpretation. (i) One should vary the GUP corrected current, proportional to Eq. (30) of Ref. [2], which gives $\frac{\Delta I}{I} \sim -k_1 \Delta a + \beta_0 \ell_{\rm pl}^2 k_1^3 \Delta a$. Clearly, the last term being much smaller is the relevant one, and when this is combined with Eq. (32) of [2], β_0 cancels from both sides, and no bound on the latter is obtained. (ii) Surfaces are imaged in a STM in two ways, the constant height mode, in which a and the voltage V are held fixed, while I changes, and the constant current mode, in which the I is held fixed and a varies. The former being a faster method is often preferred, and our calculations *per se* pertain to this mode, in which the variation of a and its available accuracy of measurement are irrelevant.

(3) The authors of [1] claim that statistical errors could be important in STM measurements. This may indeed be the case. However, we would like to remind the readers that our analysis was intended to show that in principle the GUP can affect well-understood quantum mechanical systems such as the STM. If actual experiments to measure these effects are planned, one would of course have to take into account many such sources of error and other tiny physical effects as well. Furthermore, their bound of $\beta_0 > 10^{39}$ is based on their assumed accuracy of measurement of the current, time, etc., whereas much better measurements already exist. Thus this bound does not seem to be robust.

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