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SUPPLEMENTARY INFORMATION

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Electrical control of single hole spins in nanowire quantum dots

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1. Bandgap of InSb nanowires

We extract the bandgap of our InSb nanowires using the basic device described in Fig. 1 of the main text. On the left side of Fig. S1, the Fermi level is in the valence band, resulting in a finite current away from zero bias. At less negative V_{BG}, the Fermi level is inside the bandgap and the current is suppressed. On the right side of the figure, at even less negative V_{BG}, current is restored as the Fermi level moves into the conduction band. We extract the bandgap, ~0.2 eV, from the extent of the non-conducting region, as shown by the arrow in Fig. S1. This value is in agreement with the gap of bulk InSb (~0.17 eV at room temperature and ~0.23 eV at low temperatures [1]), and is confirmed by similar measurements in one other InSb nanowire device.

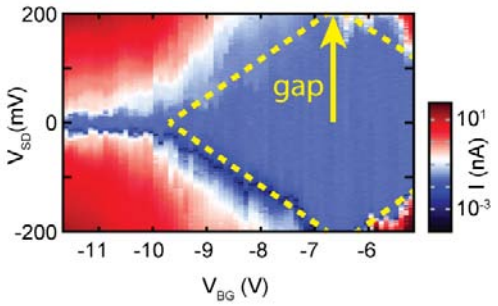

Fig. S1: Current through an InSb nanowire as a function of V_{SD} and V_{BG}.

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