

Supplementary Materials:

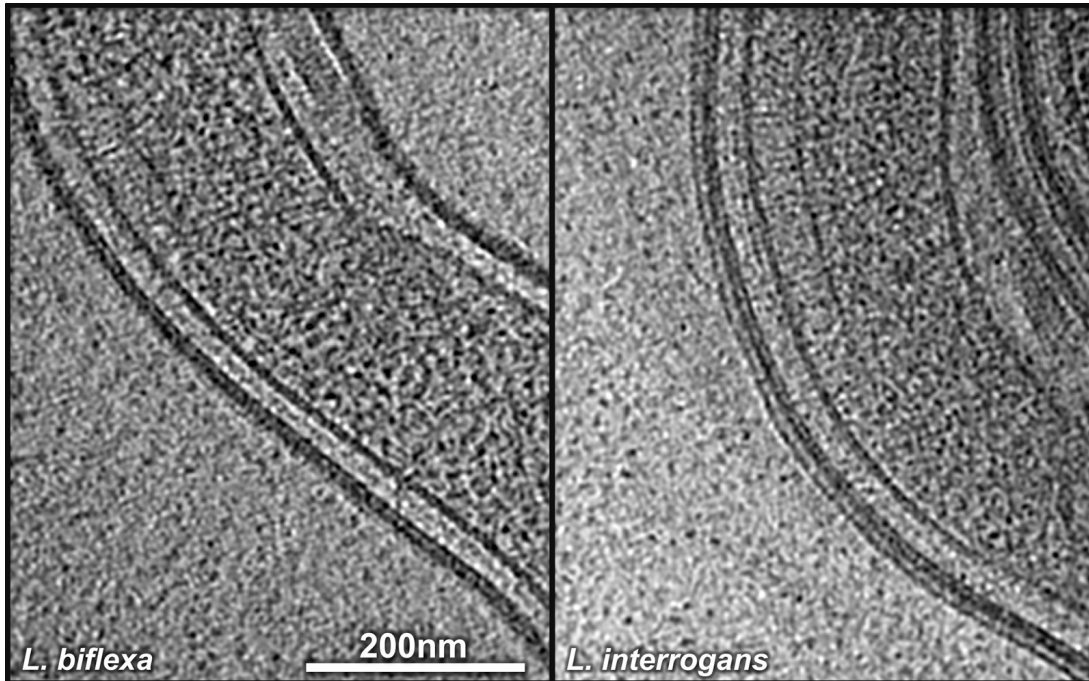


Fig. S1. Proteinase K treatment of *L. biflexa* (A) and *L. interrogans* (B). Proteinase K treatment was ineffective in eliminating any visible density layer, suggesting that neither visible layers are formed by outer membrane proteins as those observed in *B. burgdorferi*.

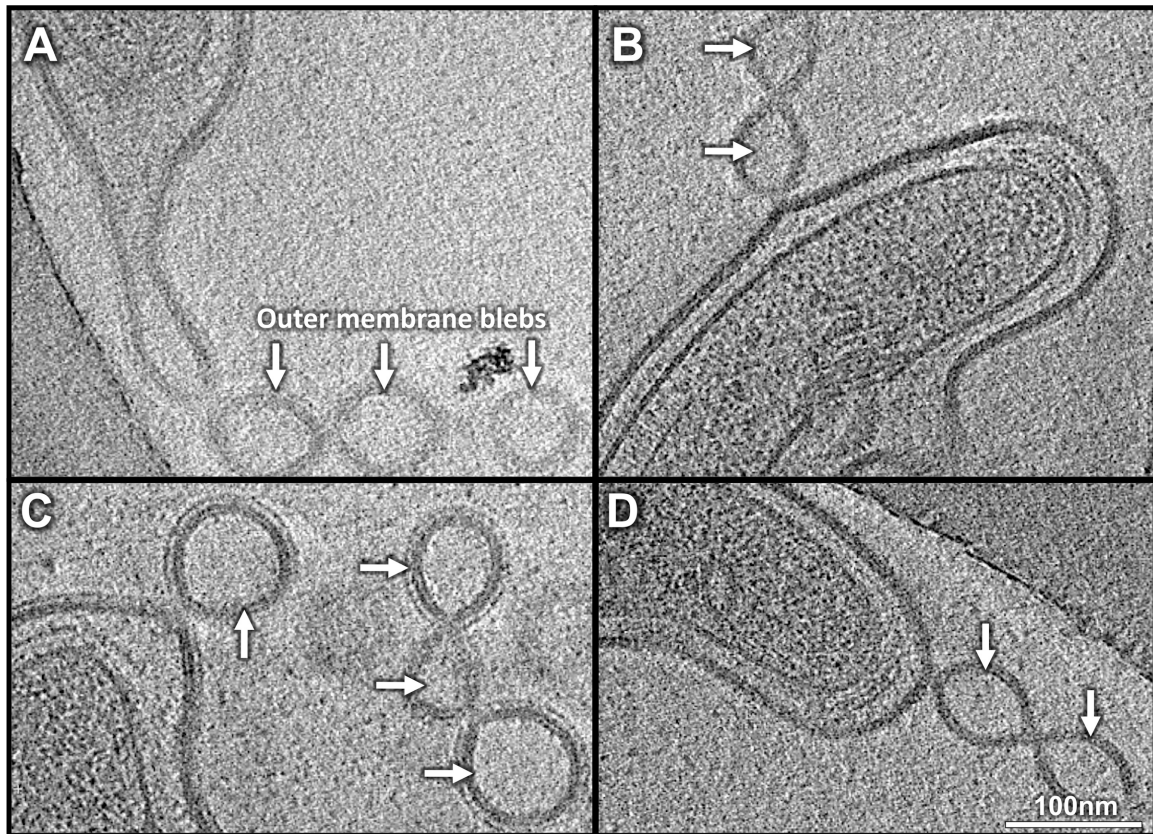


Fig. S2. Outer membrane blebs of *Leptospira* spp. (A) Vesicles budding from a protrusion at the end of a *L. biflexa* cell showing the typical ‘string-of-pearls’ morphology. **(B)** Another example of OM blebs from *L. biflexa* showing more circular separated vesicles. **(C)** “String-of-pearls’-like OM blebs of *L. interrogans* budding from the end of the cell. **(D)** Membrane bleb budding from lateral part of the cell.

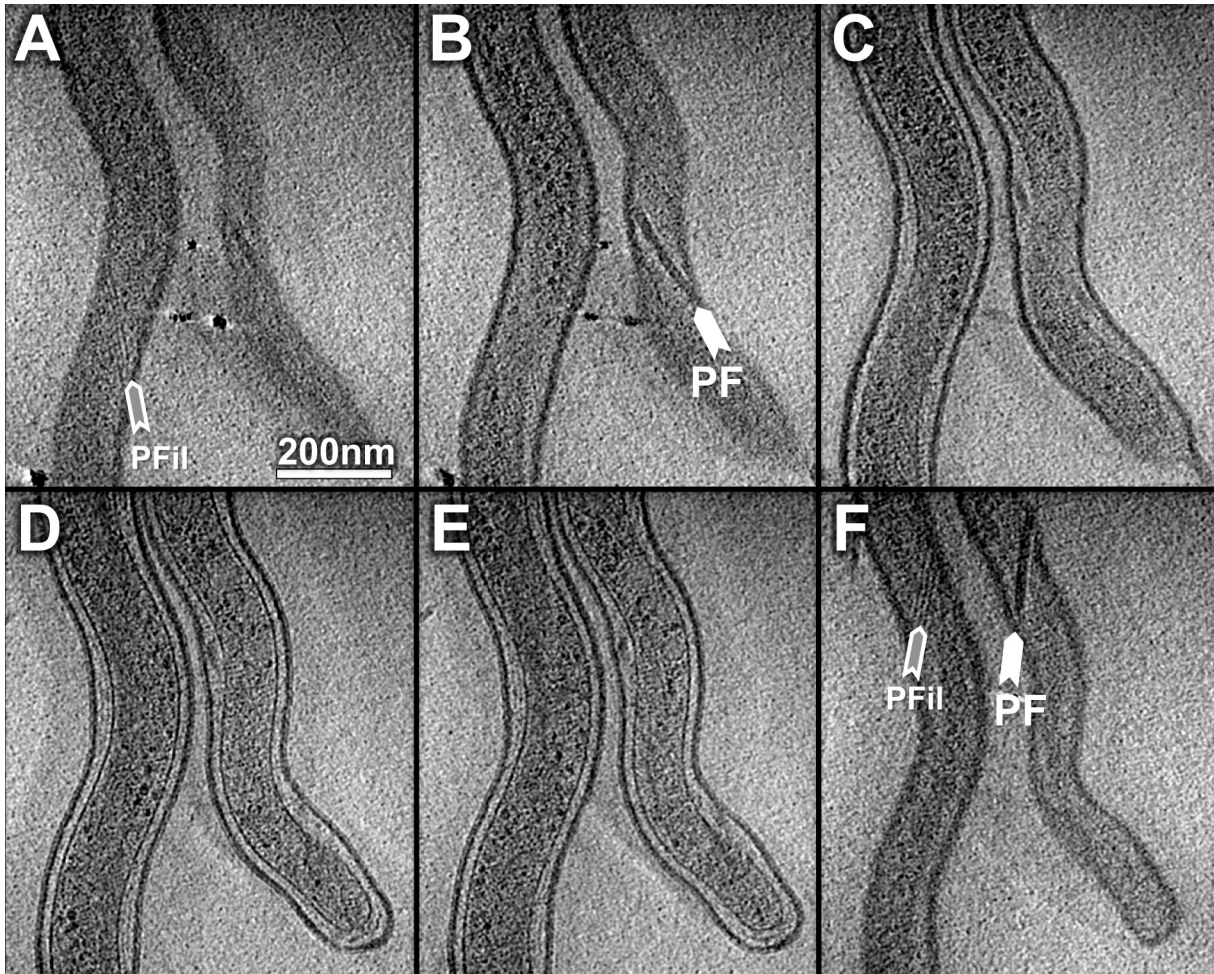


Fig. S3. Tomographic reconstruction reveals novel periplasmic filaments. Six slices from top to bottom of the tomogram are shown in (A-F).