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**Q-factor spoiling of a fused silica microsphere** PABLO BIANUCCI,  
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at Austin — When a planar transparent surface is brought close to a microsphere  
resonator, the induced leakage will result in a decrease of the Q-factor of the resonant  
modes. We present a systematic study of the Q-factor spoiling on a fused silica  
microsphere using a tapered optical fiber as a waveguide and a cleaved fiber as a  
planar surface. The Q-spoiling is measured as function of the distance between the  
microsphere and the cleaved fiber. Different modes show quite different deterioration  
rate for the Q-value as a function of sphere-fiber distance. This Q-decay rate is  
directly related to the evanescent nature of the cavity modes.

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