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## The making of a video about “Can one hear the shape of a drum?”

### **Abstract:**

We describe the main challenges encountered during the making of a video for public scientific dissemination of math concepts, where “Can one hear the shape of a drum?” was one of them. From the difficulty of making a simple, brief script for general public to the required software and models to realistically animate the membrane and sound of drums in matlab for the film. In particular, the numerical verification of isospectrality for polygonal drums was a real and almost impossible challenge. We revisit some works in this direction and we show the final video obtained that can be useful for similar future educational or dissemination films.