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Freely Suspended Nematic Films¹ WILDER IGLESIAS, JEFFREY CHOI, ELIZABETH K. MANN, ANTAL JAKLI, Kent State University — Using one of the most commonly studied synthetic molecule, 4-Cyano-4'-pentylbiphenyl (5CB), we were able to pull freely suspended membranes of different thicknesses into circular frames of up to 20mm diameter. Films pulled this way were distorted using a speaker, while a laser light was shone onto them for studying the far field reflection and learn about resonant frequency modes and subtract valuable information about the viscoelastic terms that hold the membrane stable.

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