Pressure and tension in momentum-conserving active fluids[1] SRI-RAM RAMASWAMY, TIFR Centre for Interdisciplinary Sciences, 21 Brundavan Colony, Osman Sagar Road, Narsingi, Hyderabad 500 075, MADAN RAO, Simons Centre for the Study of Living Machines, National Centre for Biological Sciences, GKVK Campus, Bellary Rd, Bengaluru, Karnataka 560 065 — We consider a fluid governed by the Navier-Stokes equation, driven by stresses carried by a suspension of rotationally diffusing self-propelled objects. We present results on the scale-dependence of the steady-state pressure and the dynamics of fluid interfaces in such a system.

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