

We present the HECTOR sub grid model, a semi-analytical code capable of calculating 1D stationary solutions around contact discontinuities including radiative cooling and heat conduction. We use HECTOR to correct unresolved contact discontinuities in FLASH simulations of interstellar bubbles driven by stellar winds. Low resolution simulations underestimate the mass of hot ($T > 3.5 \times 10^5$ K) gas in the bubbles by a factor of $\sim 2-3$. With HECTOR we are able to reproduce the results of high resolution simulations at lower resolutions. Our results are in agreement with the semi-analytical solution by Weaver et al. [1977]. Unlike Weaver et al. [1977] solution, HECTOR is much more general and can be used in a wide variety of 1D or 3D simulations.