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Quenched Fermi gases PAUL DYKE, ANDREW HOGAN, IVAN HER-RERA, SASCHA HOINKA, CARLOS KUHN, CHRIS VALE, Swinburne Univ of Tech — We present studies of two-component Fermi gas following a rapid quench from weak to strong interactions. Starting with a spin-balanced weakly attractive gas of lithium-6 atoms in the normal phase, we ramp the interactions to the unitarity limit at a range of sweep rates to investigate the dynamics of the pair condensate formation. By fitting the equation of state for the unitary gas we can determine the amount of energy and entropy added as a function of the sweep rate and investigate the timescales for the formation of the superfluid and pair correlations in the strongly interacting regime.

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