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Universal relations for Fermi gases in arbitrary dimension MANUEL VALIENTE, NIKOLAJ T. ZINNER, KLAUS MOLMER, Department of Physics & Astronomy, Aarhus University — We present universal relations for Fermi gases with pairwise renormalizable contact interactions in arbitrary dimensions. The derivation of these relations is given by using the explicit form of a class of generalized functions — Tan's selectors — in the momentum representation. These selectors implement the short-distance boundary conditions in a straightforward manner and leads to simple derivation of the universal relations.

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