In ultracold atomic gases, the characteristic ranges the atomic interactions usually much shorter than the thermal de Broglie wave lengths of the atoms, as well as the average distances between the atoms. The atoms may therefore be treated as point particles having contact interactions to a good approximation. Within the model of contact interactions, many exact results may be derived They relate the short-range correlations to other observables such as the the momentum distribution and they are valid for both few-body and many-body systems. The ideas developed in the study of these extremely low-energy atoms, such as a mathematical approach to control the ultraviolet divergences, are directly relevant for high-energy particle physics, in which Special Relativity requires the fundamental interactions between elementary particles to be contact