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**Universality and novel phases in the BCS-BEC crossover**

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We discuss the BCS-BEC crossover in a degenerate Fermi gas near a Feshbach resonance. The origin and experimental verification of universal thermodynamic and dynamic properties at resonance is discussed. In the spin imbalanced situation, novel phases appear like a ‘magnetized’ superfluid or a (FFLO) phase with nonzero momentum Cooper pairs. Their qualitative properties and the associated experimental signatures are outlined.