Two years ago, the discovery of high-temperature superconductivity in iron-pnictides reshaped the landscape of condensed matter physics. Until that time, for more than two decades, the copper-oxide materials were the only high-temperature superconductors and their mysterious properties loomed large as perhaps the greatest intellectual challenge in our field. Cuprates are strongly interacting systems, near to the so-called Mott insulating limit, in which electrons are made motionless by strong correlations. It is currently believed that much of their unusual behavior stems from such Mott correlations. In contrast, at least several members of the newly discovered iron-based family of high-temperature superconductors exhibit a more moderate degree of correlations and do not appear to be near the Mott limit. Consequently, some of their properties might be easier to understand. In this talk, the basic ideas in theory of iron-pnictides will be introduced and illustrated with experimentally relevant examples. Particular attention will be paid to the interband resonant-pairing mechanism of multiband superconductivity and the renormalization group description of the underlying physics, the approach which by now has reached a certain level of consensus. This will be contrasted with strongly correlated cuprates, where conceptual problems are far more difficult and a number of deep theoretical suggestions have been put forward, from quantum fluctuations to Berry phases, from gauge field theory to non-Fermi liquids of various kinds to AdS/CMT duality, all currently being tested in a set of remarkable recent experiments.