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Legendrian knot theory is the study of knots and links that satisfy a geometric condition imposed by a contact structure. In recent years, generating families and Morse theory have been used to develop new homological invariants for knots and links in contact manifolds equivalent to  $\mathbb{R}^3$  and  $S^1 \times \mathbb{R}^2$ . These invariants parallel Legendrian contact homology, and can be used to show that certain knots and links are topologically equivalent but not Legendrian equivalent. This talk will explore the extension of the generating family approach to circle-valued functions, allowing for the study of Legendrian knots and links in  $T^2 \times \mathbb{R}$  (and, more generally, of Legendrian submanifolds in a variety of 1-jets spaces). New invariants are developed using techniques inspired by Morse-Novikov theory, allowing us to address several difficulties presented by the introduction of circle-valued generating families. In particular, we address the ways in which Legendrian submanifolds and their generating families can wrap around a contact manifold, as well as the problem of differentiating multiple components generated by a single family. (Received August 16, 2013)