In 2016, Huang-Lutwak-Yang-Zhang proposed the dual $L_p$ curvature measures and solved the $L_p$ dual Minkowski problem for $0 < p \leq n$ in their seminal paper published in Acta Mathematica.

Our main result is the dual Orlicz-Minkowski problem which is a special generalization of their work. These problems are dual to the Orlicz-Minkowski problems (extensions of the classical Minkowski problem involving nonhomogeneous functions). That is: for a continuous function $\phi : (0, \infty) \to (0, \infty)$ and $\mu$ a given nonzero finite Borel measure on the unit sphere, can we find a constant $\tau$ and a convex body $K$ such that $\mu = \tau \widetilde{C}_\phi(K, \cdot)$? Here $\widetilde{C}_\phi(K, \cdot)$ is the dual Orlicz curvature measure of $K$. Based on the established variational formula for the dual Orlicz quermassintegral, a solution to the dual Orlicz-Minkowski problem regarding the dual Orlicz curvature measure is provided. This poster is based on a joint work with Baocheng Zhu and Deping Ye.