Lusin theorem for Orlicz-Sobolev capacity

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This talk is based on a joint work with Franz Gmeineder and David Kubíček. We will discuss the Lusin-type theorem for the Orlicz-Sobolev capacity. The classical Lusin theorem states that a real Lebesgue measurable function is continuous everywhere except on a set of arbitrarily small Lebesgue measure. We show that if we assume more regularity of the function, then we obtain finer properties. More precisely, every function from the first-order Orlicz-Sobolev space has a representative which is continuous everywhere except for a set of arbitrarily small Orlicz-Sobolev capacity.