Compact composition operators on Hardy-Orlicz spaces

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The purpose of this talk is to study the boundedness and especially the compactness of composition operators on Hardy-Orlicz spaces H^{ψ} of the ball of \mathbb{C}^N . En route to this work, we give characterizations of boundedness and compactness of these operators on H^{ψ} ; first we exhibit a class of Orlicz functions defining small Hardy-Orlicz spaces on which every composition operator is bounded. Then we give some results about compactness, trying to make a link between the "size" of the Hardy-Orlicz space and the behavior of composition operators acting on it.