# Generating entangled photons with tailored correlations for real-time quantum wavefront shaping

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Quantum technologies hold great promise for revolutionizing photonic applications such as cryptography and imaging. Yet their implementation in real-world scenarios is held back, mostly due to sensitivity of quantum states of light to scattering. Recent developments in shaping of single photons introduce new ways to control scattering of quantum light. Here we cancel scattering of entangled photons, by shaping the classical laser beam that stimulates their creation. We show that when the laser beam and the entangled photons pass through the same diffuser, focusing the laser using classical wavefront shaping recovers the unique correlations of entangled photons, which were scrambled by scattering. Since the shaping is done exclusively on the classical laser beam, it does not introduce loss to the entangled photons, and it is not limited by the low signal-to-noise ratios associated with quantum light, opening the door for real-time wavefront shaping for photonic quantum applications.