Supporting Information

Botcherby et al. 10.1073/pnas.1111662109

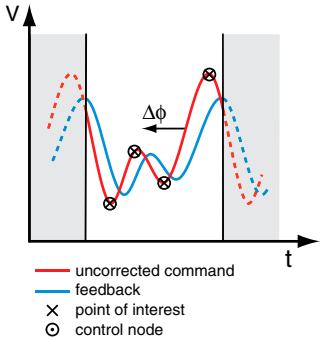

Fig. S1. Illustration of the automated correction algorithm on a trajectory with four user-defined points of interest (marked as crosses). Initially, periodic cubic splines are fitted through the points of interest to define a continuous trajectory. Each galvanometer is then driven with its trajectory component and the feedback signal recorded to find the true trajectory that is followed. A phase correction is then applied to remove lag.

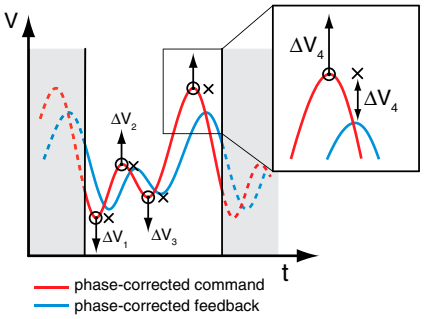

Fig. S2. Following the first step, each node is corrected by adding on the difference between its position and the feedback signal. From this new set of data a fresh trajectory is calculated which drives the galvanometers through the original points of interest with greater accuracy.

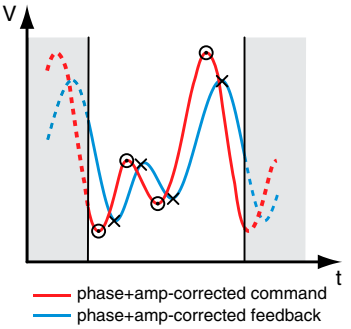

Fig. S3. After correction, the focal spot passes within 0.5 μm of each control point.