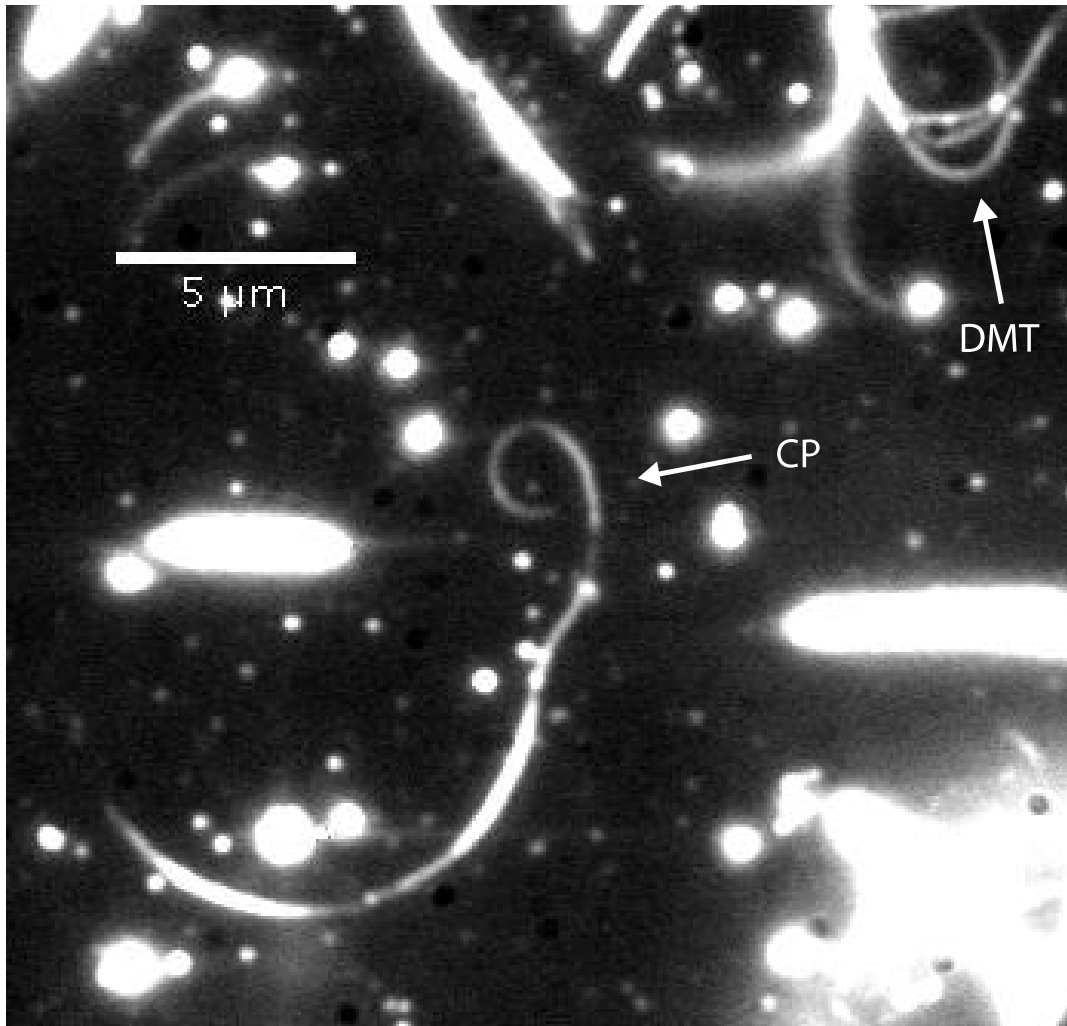


# **Motor Regulation Results in Distal Forces that Bend Partially Disintegrated *Chlamydomonas* Axonemes into Circular Arcs**

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**Supplementary Figure 1** Disintegrated axoneme with associated central pair. Axonemes disintegrated in the presence of disintegration solution (see Material and Methods) containing 10 $\mu$ M ATP and imaged using dark-field microscopy. In rare cases, the central pair (CP) stayed attached to the disintegrated axoneme (see CP). The radius of curvature of the CP was curvature of 1.1  $\mu$ m<sup>-1</sup>, similar to the curvature observed for extruded CP's using electron microscopy (Yuka Hosokawa and Taiko Miki-Noumura 1987)\*.

Integrated intensities were calculated from perpendicular intensity profiles with a width of 500 nm, which were background subtracted and integrated. The integrated intensity of the CP was (8.4  $\pm$  1.8) 10<sup>3</sup> counts, (mean $\pm$ -SD, N=8 measurements along the CP). The mean intensity of four doublet microtubules (DMT) on a neighboring disintegrated axoneme was (7.9 $\pm$ 2.1) 10<sup>3</sup> counts (mean $\pm$ -SD, N=4 doublets). The mean-CP intensity is less than 10% smaller than the mean-DMT intensity.