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**Chirality Separation in Larger Diameter Nanotubes** JEFFREY FAGAN, JI YEON HUH, ANGELA WALKER, NIST, ERIK HOBBIE, North Dakota State Univ. — Separation of carbon nanotubes by their chiral vector becomes increasingly difficult as the diameter of the nanotube, and thus the number of combinatorial possibilities, increases. Here the separation of laser ablation and electric arc synthesized SWCNTs by the apparent chiral angle, but not diameter, of the SWCNTs is reported. Separation is achieved through ultracentrifugation, and non-intuitively works under the experimental conditions only for larger diameter SWCNTs. Characterization of the resulting fractions was performed through resonant Raman, NIR photoluminescence and UV-vis-NIR absorbance spectroscopies.

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