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**Remarks on Edge States with the Aharonov-Bohm Flux** KEN-ICHI SASAKI, YOSHIYUKI KAWAZOE, RIICHIRO SAITO, Tohoku University, SHUICHI MURAKAMI, Tokyo University — It was shown theoretically that zigzag edges of graphite ribbon and of nanotube contain peculiar localized states whose energy eigenvalue exists between conduction and valence band. We point out that there are two critical edge states in metallic zigzag nanotubes whose localization length is sensitive to the mean curvature of a nanotube and they can be controlled by the Aharonov-Bohm flux along tubule axis.

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