

Abstract Submitted
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Neutrino Oscillations Above A Black Hole Accretion Disk AN-
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State University, REBECCA SURMAN, Union College Schenectady — Black hole
accretion disks can occur in certain core collapse supernovae as well as in the mergers
of compact objects. This environment produces a strong flux of electron neutrinos
and electron antineutrinos. These neutrinos are instrumental in determining the
type of elements produced in disk outflows. In the context of this scenario, using
the single angle approximation and a constant temperature disk, we report on cal-
culations of neutrino flavor transformation driven by neutrino self interactions. We
comment on the impact on element synthesis.

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