

BURSTING X-RAY SOURCES: A THEORETICAL FRAMEWORK FOR ACCRETION MODELS*

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We consider spherically symmetric accretion flow onto a strongly magnetized neutron star. We show that, under certain conditions, the flow is intermittent and that the resultant accretion luminosity (X-rays) from the stellar surface is akin to that observed in the bursting X-ray sources. We investigate the properties of such burst flows under a variety of conditions, in the hopes of providing a basic theoretical framework on which realistic models of the observed bursting sources can be built. This work was supported in part by NSF Grant PHY75-08790.

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