

Abstract Submitted  
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**The dynamics of mercury flow in a curved pipe** YAN ZHAN, FO-  
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DONALD, Dept. of Physics, Princeton University — Mercury has been investigated  
as a potential high-Z target for the Moun Collider Accelerator project. Preliminary  
design of the target delivery system involves pipe curvature and axially-dependent  
pipe radius. The investigation of the dynamics of mercury flow under these con-  
ditions is undertaken with the goal of obtaining the proper nozzle design for this  
application. Depending on the Dean number, rotational body force modes are ob-  
served, with dynamics that are considerably different from these in a straight pipe  
of constant radius.

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