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Investigating the dynamic flow within tumbling mills.

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Tumbling mills are an important part of mineral processing systems, which makes use of the comminution process to break down a large body into smaller pieces by crushing and grinding. The shape and flow of the internal bulk is important in understanding the effectiveness of the comminution process. In this investigation we make use of the technique of fast neutron radiography, at the PTB cyclotron in Braunschweig, to examine the behaviour of the bulk within a tumbling mill having internal mixes of steel, wood and plastic pellets. The layering and shapes of the bulk are observed via radiography, this used to infer the motion, density distribution and effective mixing of the bulk which impacts the comminution process.

Apply to be
 considered for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD, N/A)?

PhD

Main supervisor (name and email)
and his / her institution

Professor Andy Buffler
andy.buffler@uct.ac.za
University of Cape Town

Would you like to
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 for the Conference
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Yes

Primary author: Mr DANIELS, Graham (Necsa)

Co-author: Prof. BUFFLER, Andy (University of Cape Town)

Presenter: Mr DANIELS, Graham (Necsa)

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