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Dripping like Pollock BERNARDO PALACIOS, SANDRA ZETINA, ROBERTO ZENIT, Universidad Nacional Autonoma de Mexico, CHRIS MCGLINCHEY, Museum of Modern Art, New York — In this investigation we have reproduced, in a controlled manner, the dripping technique used by Jackson Pollock to creat abstract paintings. We drip a fluid jet on top of a horizontal surface, varying the height from the substrate, the liquid flow rate and the displacement speed of the nozzle. We are able to reproduce the coiling and dripping instabilities which characterize the characteristic patterns of Pollock's paintings. We also found that the non Newtonian properties of the paints are of great importance to create these patterns. Since the fluid jets are rapidly stretched, the sudden increase of extensional viscosity plays an important role to produce the characteristic Pollock patterns. Some preliminary results will be shown and discussed.

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