Abstract Submitted for the DFD15 Meeting of The American Physical Society

Analysis of the triple contact point in electrowetting SAM BRZEZ-ICKI, DARREN CROWDY, ELENA LOUCA, None — In electrowetting applications, it is often necessary to consider static conducting droplets sitting on substrates. In this talk we perform a detailed study of the triple contact point at which the droplet, the ambient medium and the substrate touch. A local analysis is performed to understand the nature of the field singularities at the contact point. We also present some global solutions obtained using a novel transform formulation and gain insights into how those solutions depend on the system parameters.

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Date submitted: 28 Jul 2015

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