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Debye Shielding ROBERT JONES, Emporia State University — We usually expect that a biased electrode in contact with a plasma will effect only its immediate surroundings. The plasma will tend to shield itself from the applied electric potential, the characteristic shielding distance being the Debye length. This is not the case for biased gun electrodes which can project a nonneutral plasma beam relatively long distances across a magnetically confined plasma (Controlling the plasma potential across a magnetic field, Trans. Kansas Acad. Sci., vol 93, pg 125, R. Jones, 1990 and Plasma heating with electrically biased plasma guns, Trans. Kansas Acad. Sci., vol 97, pg 136, R. Jones, 1994) See also my website www.robert-w-jones.com and blog www.robertwilliamjones.blogspot.com

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