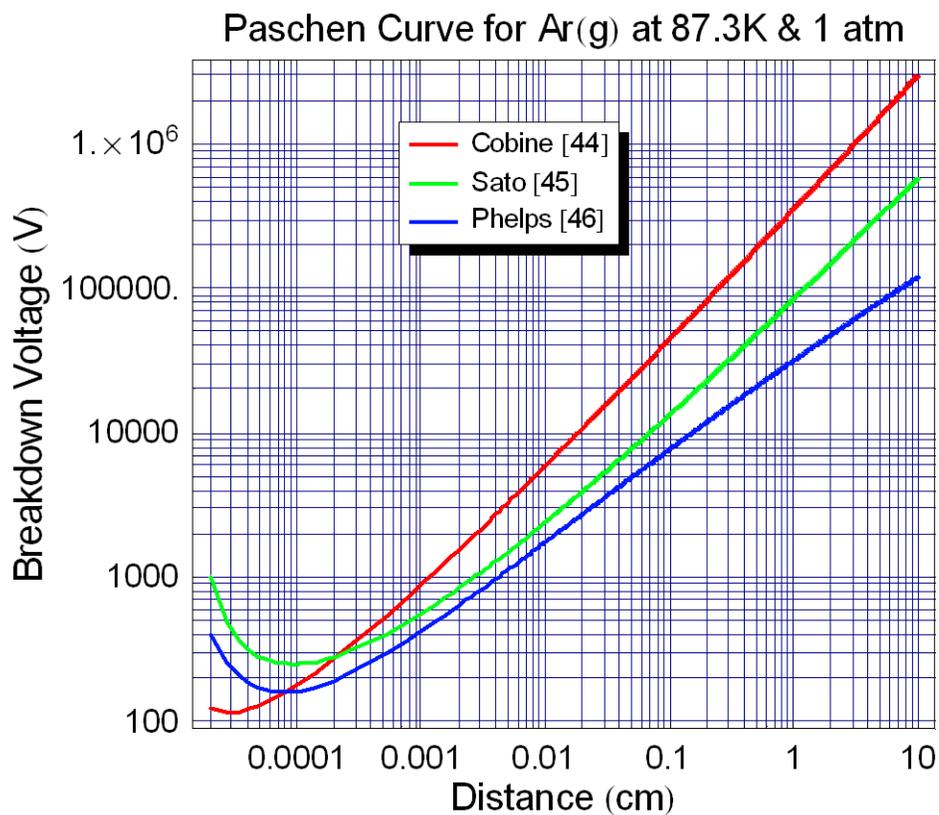


Breakdown Voltage [44, 45, 46]



All of the curves in the figure are scaled from measurements made at and above room temperature. This requires an extrapolation to reach the largest distances in the figure. The “Phelps” curve represents actual measurements up to 1 cm on this scale; the others are larger extrapolations. The breakdown voltage is very sensitive to the presence of electronegative impurities at large distances, and to electrode preparation at small distances. Electronegative impurities and dirty electrodes increase the breakdown voltage. Since the cleanliness of LAr is extremely good, it is advisable to assume that actual breakdown will occur below the lowest reported values in gas at higher temperatures.