

First Results from a Plasma Focus with Beryllium Electrodes

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To test the hypothesis that heavy-metal impurities reduce fusion yield in a plasma focus device, we have replaced the previous tungsten electrodes in our device with beryllium electrodes. Together with other improvements designed to reduce to a minimum all high-z impurities in our plasma, these beryllium electrodes are expected to eliminate the effect of these impurities on plasmid density and thus on fusion yield. We present here the first results from experiments at peak currents above 1 MA and compare them with the earlier results with tungsten and copper electrodes.