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## 1P73 - High Rate Charge and Discharge of High Voltage Capacitors\*

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In the work presented here, a well-controlled study has been performed to characterize the performance of a high-voltage, pulsed-power capacitor when it is recharged to 100 kV in 100  $\mu$ s. A CLC testbed has been assembled to supply the high rate pulsed recharge current to the capacitor being studied. Experiments are being performed in a controlled temperature environment ranging from 20 deg C to 60 deg C. The capacitors are of interest for use in compact, repetitive rate, Marx generator sources used to supply pulsed power to a few different loads. The testbed will be discussed along with the experiments planned in the coming months.

**Authors:** Mr MARTINEZ, Christopher (University of Texas at Arlington); WETZ, David (University of Texas at Arlington); Mr SANCHEZ, Jacob (University of Texas at Arlington); Mr DODSON, David (University of Texas at Arlington)

Presenter: Mr MARTINEZ, Christopher (University of Texas at Arlington)

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