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Type: **Early Career (Eligible for Oral or Poster)**

## Development of a Compact Periodic Permanent Magnet Focused C-Band Klystron

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A C-band klystron is being developed to provide power to a fully integrated compact linear accelerator system. The design of this high-power RF source was centered on minimizing weight and volume. In doing so, a novel periodic permanent magnet focusing circuit was developed alongside a compact RF circuit to achieve > 50% efficiency in simulation. Fabrication of this system is underway and high-power tests will be performed.

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**Session Classification:** Accelerator: Normal Conducting RF

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