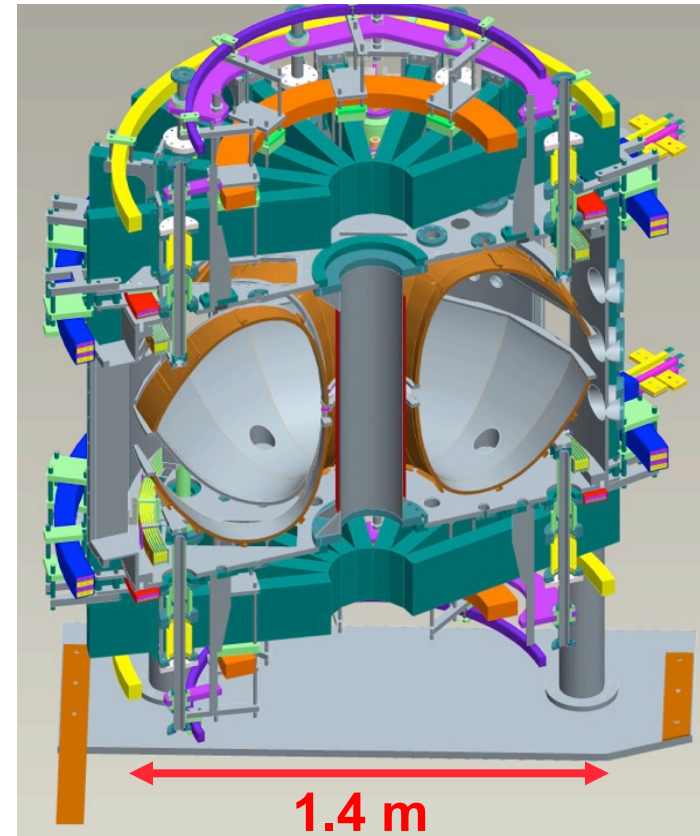


LTX and LTX- β

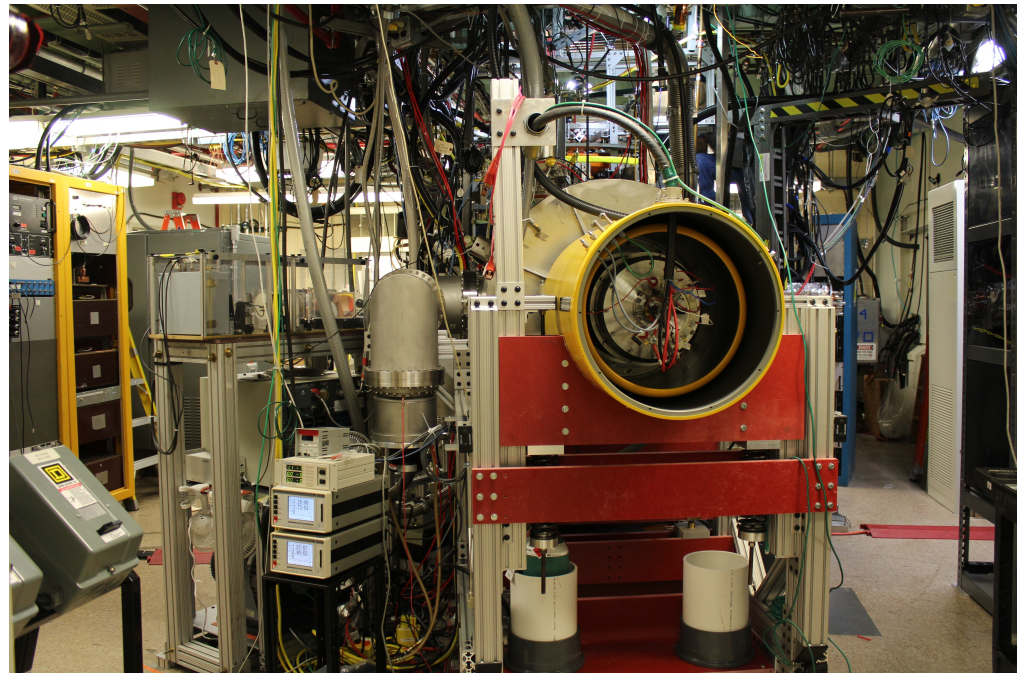
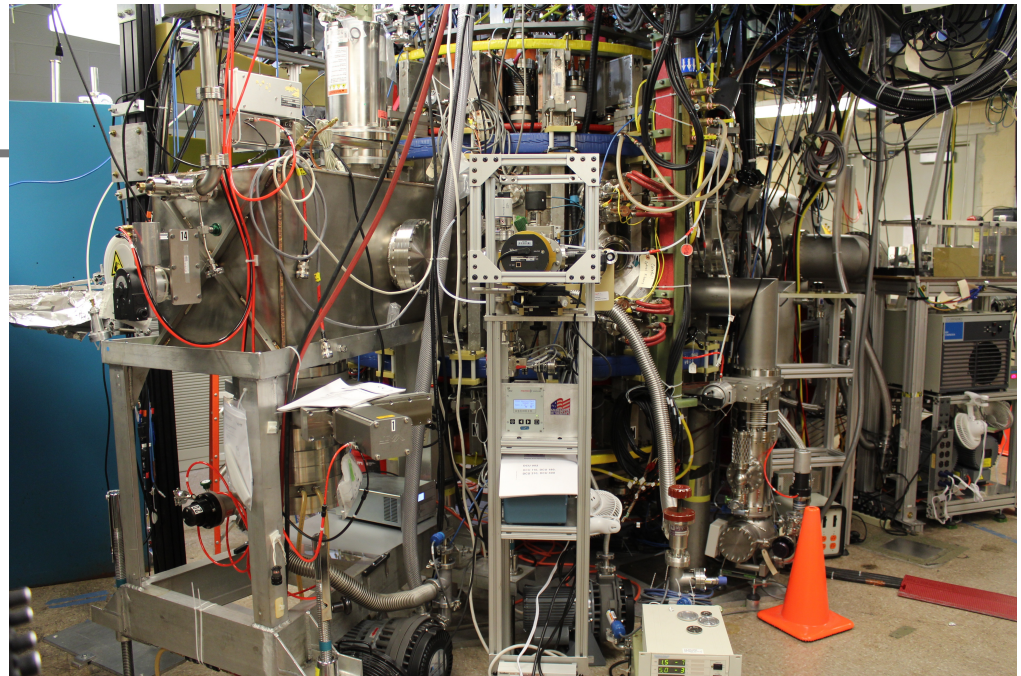
	LTX	LTX-β
A	1.6	1.6
R_0	40 cm	40 cm
a	26 cm	26 cm
B_T	<1.7 kG	<3.4 kG
I_p	<100 kA	<200 kA
P_{aux}	0	700 kW
Pulse length	<50 msec	<100 msec

- ◆ High field-side limited by a conformal, high-Z wall
- ◆ Operated in hydrogen (gas puffing)
 - 35A neutral beam fueling, improved HFS puffing, topside SGI
- ◆ CHERs, many new diagnostics



LTX- β status

- ◆ Machine is fully operational
- ◆ All coils and power supplies have been run to 100% of startup requirements
- ◆ Neutral beam power supply tested to full operating parameters
- ◆ Neutral beam grids have been hipotted to 40 kV
 - 2x operating voltage
 - Source has *not* been operated
- ◆ Mounting the NSTX-U granule injector
- ◆ Still adding diagnostics
- ◆ But: permission to run LTX- β with plasma has not been granted



Near-term program

- ◆ Begin with discharges on uncoated stainless steel walls
 - Baseline shots
- ◆ First lithium experiments will use the granule injector
 - Will permit comparison of lithium granule injection vs. evaporative wall coatings
- ◆ Evaporative coating of walls with lithium expected in late October/early November
 - New evaporators also intended for use in NSTX-U
- ◆ Procedures for beam operation in preparation
 - Hope to operate beam into the calorimeter late this month or early October
- ◆ Characterization of beam heated, fueled plasmas with low recycling lithium walls a lab notable for March 2019