

What follows — roadmap to the safety factor q

- **Definition of the safety factor** — toroidal/poloidal twist of magnetic field lines.
- **Circular tokamak geometry** — relation between B_t , B_p and plasma current.
- **Quantities measured @tG** — $I_p(t)$ from Rogowski, B_t from toroidal field coils, geometry (R_0, a).
- **Computing the edge safety factor** — $q(a) = \frac{2\pi a^2 B_t}{\mu_0 R_0 I_p}$.
- **Typical operating window** — GOLEM: $2 < q(a) < 6$, stability limits $q(0) > 1$, $q(a) \gtrsim 2$.