

With respect to the complexity of the tokamak technology, the data access system of the GOLEM tokamak was designed to allow students to get easily oriented within large amount of various data in a limited time. Therefore, most of the variables on the discharge homepage contains links to the wiki system with their detail explanations and correct definitions.

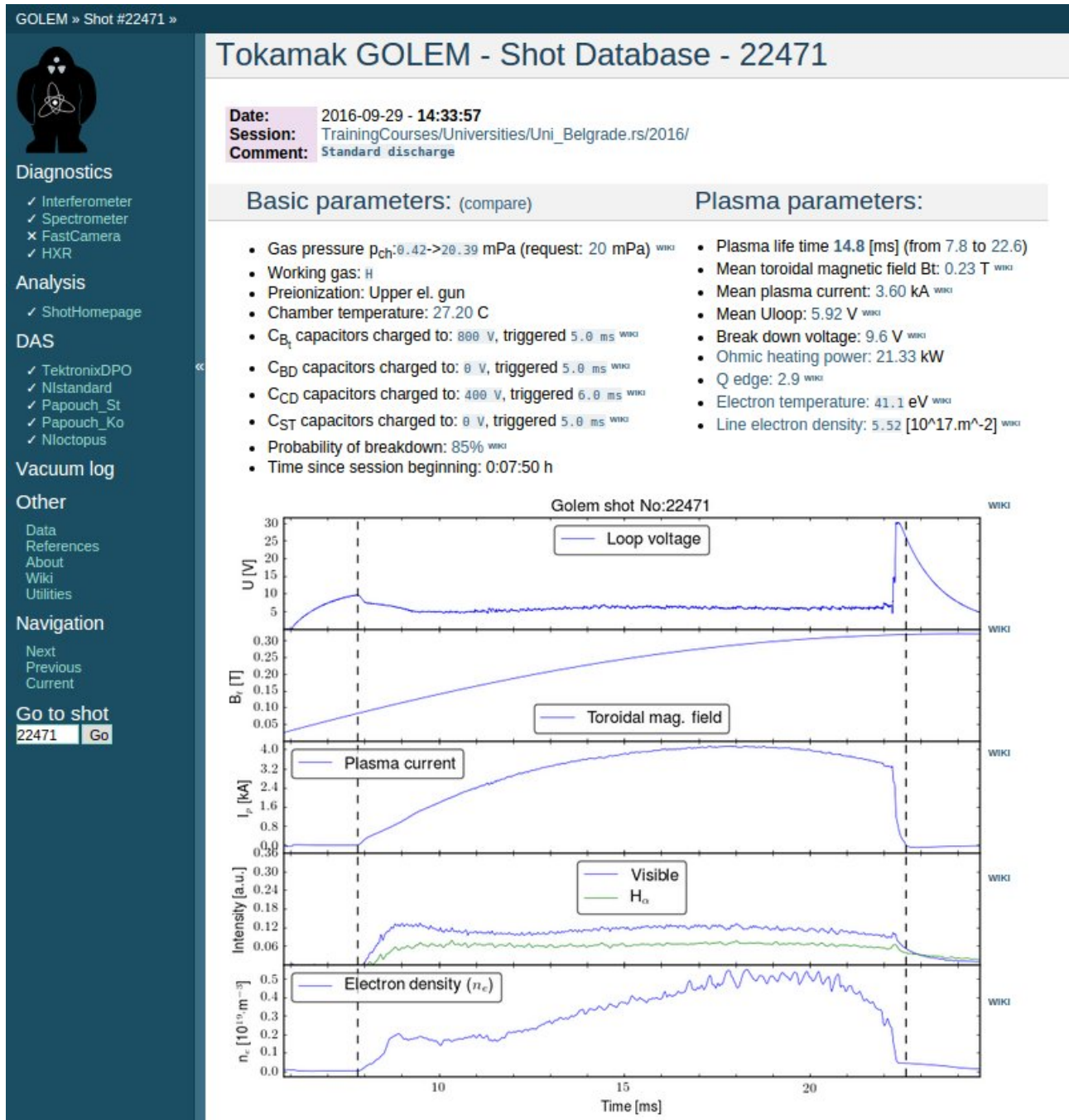


Figure 1: Home page of the GOLEM discharge containing all important informations and references to the diagnostics and and evaluated analysis of these measurements

The discharge homepage provides all important information about each discharge and it is divided into specific parts: *i*) **Basic information**, listing all the technological parameters of the discharge and consequently acquired physical variables presented in the form of values or time dependent characteristics. An automatic tag system is provided to improve orientation within the large number of discharge in the database and search for discharges with similar setting or plasma behaviour. *ii*) **DAS**, presenting all Data acquisition systems presently gathering data in the form of raw voltage signals. *iii*) **Diagnostics**, other diagnostic systems, like spectrometer, fast visible light cameras [Odstrcil et al., 2012] and additional processing of raw signals from DAS *iv*) **Analysis**, recalculated physical values combining multiple diagnostics and DAS with advanced data processing methods and plasma models allow to quantize more complex plasma phenomena such as magneto-hydrodynamic modes, reconstruction of the plasma position or time evolution of impurities in plasma discharge.

Furthermore, historical analysis show evolution of important plasma parameters over large time periods allowing to evaluate results of different plasma cleaning methods or improved plasma positioning scenarios. *v)* **Analysis tools**, PyGoPlot - web based plotting system that allows to quickly compare time evolution of different signals from multiple diagnostics and discharges, GoSQL - a simple web-based data-mining tool designed for fast filtering and comparing scalar variables over a large number of discharges and determination of correlation and dependencies between them, and GoSearch - a web-based tool designed for searching in the discharge database and filter out discharges with given parameters and measured values or close to them.

References

- [Odstrcil et al., 2012] Odstrcil, T., Odstrcil, M., Grover, O., Svoboda, V., Duran, I., and Mlynar, J. (2012). Low cost alternative of high speed visible light camera for tokamak experimentsa). *Review of Scientific Instruments*, 83(10):-.