Information portals are among the most challenging applications for semantic technologies. The amount of information that has to be handled typically is huge, new information has to be integrated quickly, and its representation has to adapt in a flexible way to new developments and to heterogeneous user groups. Additionally, information portals often have to cope with heterogeneous sources of information that have to be integrated on-the-fly, especially if user communities actively participate in the creation of content. Semantic technologies provide a basis for all these tasks, and methods of machine learning have to be applied for automatic or computer-aided structuring of information.

The workshop approaches the outlined problems from three different directions. Data integration and semantic web query languages aim at viewing data of heterogeneous nature in a common schema vocabulary and provide methods to access these data in an uniform way. Personalization and semantic web mining catch the user behavior, relate it to concepts of the portal domain and adapt information structuring and provide methods for assisted browsing and guided search. Applications, here mostly from the area of digital libraries, give a vertical view of the complex interaction of the different techniques, especially, if confronted with data and constraints of real-life contexts.

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