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                       -- Better Interpretable Models for Proteomics Data Analysis Using rule-
                       based Mining -- Probabilistic Logic Programming in Action --
                       Persistent topology for natural data analysis — A survey -- Predictive
                       Models for Differentiation between Normal and Abnormal EEG through
                       Cross-Correlation and Machine Learning Techniques -- A Brief
                       Philosophical Note on Information -- Beyond Volume: The Impact of
                       Complex Healthcare Data on the Machine Learning Pipeline -- A Fast

Semi-Automatic Segmentation Tool for Processing Brain Tumor Images -- Topological characteristics of oil and gas reservoirs and their applications -- Convolutional and Recurrent Neural Networks for Activity Recognition in Smart Environment.

Sommario/riassunto	The BIRS Workshop "Advances in Interactive Knowledge Discovery and Data Mining in Complex and Big Data Sets" (15w2181), held in July 2015 in Banff, Canada, was dedicated to stimulating a cross-domain integrative machine-learning approach and appraisal of "hot topics" toward tackling the grand challenge of reaching a level of useful and useable computational intelligence with a focus on real-world problems, such as in the health domain. This encompasses learning from prior data, extracting and discovering knowledge, generalizing the results, fighting the curse of dimensionality, and ultimately disentangling the underlying explanatory factors in complex data, i.e., to make sense of data within the context of the application domain. The workshop aimed to contribute advancements in promising novel areas such as at the intersection of machine learning and topological data analysis. History has shown that most often the overlapping areas at intersections of seemingly disparate fields are key for the stimulation of new insights and further advances. This is particularly true for the extremely broad field of machine learning.