



DSSC SEMINAR/ KAPTEYN COLLOQUIUM

You are cordially invited to the DSSC seminar/Kapteyn colloquium on
19 February 2018, 15.30-16.30, Bernoulliborg, room 5161.0105.
PhD students are welcome!
Borrel to follow.

Machine Learning in Astronomy: lessons learned from learning machines

Speaker: Dr. Kai Lars Polsterer
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Abstract

The amount and size of astronomical data-sets was growing rapidly in the last decades. Now, with new technologies and dedicated survey telescopes, the databases are growing even faster. VO-standards provide an uniform access to this data. What is still required is a new way to analyze and tools to deal with these large data resources. E.g., common diagnostic diagrams have proven to be good tools to solve questions in the past, but they fail for millions of objects in high dimensional features spaces. Besides dealing with poly-structured and complex data, the time domain has become a new field of scientific interest. By applying technologies from the field of computer sciences, astronomical data can be accessed more efficiently. Machine learning is a key tool to make use of the nowadays freely available datasets. This talk exemplarily presents what we learned when using machine learning algorithms on real astronomical data-set.

Biography

Dr. Kai Polsterer is a leader in the rapidly growing field of AstroInformatics, which combines Astronomy and Computer Science expertise to tackle the problems posed by astronomical big data from upcoming multi-wavelength surveys. From 2013 he leads the AstroInformatics Junior Research Group at the Heidelberg Institute for Theoretical Studies, where he has been developing techniques to compute photometric redshifts, classify radio sources and encode time series. He is also a long-standing member of the International Virtual Observatory Alliance and has led the software development effort for the Lucifer instrument at the Large Binocular Telescope.

#	Word/Term	Count	Percentage
1	時	0.191925	
2	時	0.216155	
3	國	0.219850	
4	無	0.221276	
5	風	0.221535	
6	國	0.224884	
7	陽	0.237366	
8	後	0.245206	
9	處	0.246870	
10	數	0.247783	
11	萬	0.252506	
12	雲	0.253300	

