Center of Applied Mathematics & Sciences

Department of Mathematics at UWG

Talk: High dimensional Regression
Speaker: Dr. Fengrong Wei
Time: Wednesday, 23rd September at 5:00pm
Place: Room 330

Abstract: The problem of selecting variables for accurate prediction in regression arises in many practical problems, for example in economic growth, and microarray data analysis. However when the number of predictors is much greater than the sample size, traditional methods are not applicable and better methods such as penalized methods are needed.
In this talk, I will focus on the Lasso penalty and also to its adaptive and group variants. It has been proved that Lasso will result in a sparse model, and converge at a suitable rate. But since it will either over or lower select the variables, we need then apply adaptive Lasso in order to improve the selection result. It can be proved that adaptive Lasso has nice oracle selection property.