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**Cameron Donnay Hill\*** ([cameron.hill.136@nd.edu](mailto:cameron.hill.136@nd.edu)). *Well-quasi-orders in first-order model theory.*

The notion of well-quasi-ordering plays a key role in many areas of discrete mathematics – especially, in structural graph theory where well-quasi-ordering of finite graphs by the graph-minor relation is the essential ingredient of the Graph Structure Theorem of Robertson and Seymour. I will discuss the role well-quasi-orders of definable sets plays in analyzing quasi-finite axiomatizability and geometrical finiteness (AZ-enumerability) for theories with the finite submodel property. I will also note some connections between well-quasi-orderings of the definable sets of a model and of an associated class of finite structures under an appropriate “strong-substructure” relation. (Received December 13, 2011)