1127-03-405   **Noah Schweber*** (`schweber@wisc.edu`). *Measures of complexity in computable structure theory.* I will discuss some results in computable structure theory. The main theme of this talk will be the {*dividing lines*} *these results indicate; for example, that counterexamples to Vaught's conjecture can be characterized in terms of the Muchnik degrees of their models (this is due to Montalban), and also in terms of the* {uniform} degree structures associated to them (this characterization is new). Another point of focus will be how we can apply ideas from computability theory to uncountable structures, both directly and as a tool for studying countable structures. (Received February 07, 2017)