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Saharon Shelah* (shelah@math.huji.ac.il), Department of Mathematics, Statistics, and CS, Hebrew University, Jerusalem, Israel. *Fractured a.e.c. and the parallel to superstability*. Preliminary report.

The suggested parallel to the outside definition of superstability for a.e.c. is solvability, which generalize to a.e.c. the following characterization of superstability: T is superstable iff for some Φ proper for linear order the τ -reduct of any $\text{EM}(I, \Phi)$ is saturated, the saturated is replaced by superlimit. Fractured a.e.c. are like a.e.c but we allow to decrease the class when the cardinality increase; a natural example is the class of models of a superstable T which are saturated or $(2^{|T|})^{+\omega}$ -saturated.

We shall try to explain how these notions will, we hope, help to resolve " the categoricity spectrum of $\psi \in L_{\omega_1, \omega}$ contains or is disjoint to an end segment of the cardinals. (Received August 07, 2007)