1145-03-658   **David Marker*** (`marker@uic.edu`), Dept. Mathematics UIC, 322 Science and Engineering Offices (M/C 249), 851 S. Morgan St., Chicago, IL 606077045. *Fifty years in the model theory of theory of differential fields.*

Blum's 1968 thesis introduced the use of stability theoretic methods to study differential fields. Many interesting model theoretic phenomena are illustrated in differentially closed fields and model theory methods have been surprising effective in obtaining differential algebraic results. The model theory of differential fields has also had important applications to differential Galois theory, Diophantine geometry and transcendence theory. I will survey some of these interactions. (Received September 12, 2018)