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**The Contribution of Marshall Rosenbluth  
in the Development of Plasma Drift  
Wave and Universal Instability Theories**

ABSTRACT

The influence of Marshall Rosenbluth was felt in many areas of plasma physics; one of his early and longlasting contributions was in the field of microinstabilities. He virtually invented the drift wave and its natural consequence the 'universal instability'. This process has proven to dominate transport rates in macroscopically stable confinement geometries. This paper is intended not merely to survey his work on drift wave theory and universal instabilities, but to give a hint of the thought processes that started Rosenbluth and his collaborators on this field of research. In many ways, the choice of a physics problem is as crucial as its solution. A special genius of Marshall was his insight in picking out the most immediate and far reaching problem. What follows may not show how he decided to work on microinstabilities, but at least it will hopefully show how he explained the importance of the problem to those of us who were fortunate enough to share in this work.