

On behalf of ICTP, I would like to say a few words of welcome to the participants in this symposium honoring the memory of Marshall Rosenbluth.

This is the picture of Marshall Rosenbluth as it appeared in the UCSD website soon after his death. I am sure that different people here, who have known him for many years, remember him in different forms at different stages.

I myself didn't know Marshall very much, personally. My first encounter with him was at a seminar of Alan Newell---whom some of you might know about---somewhere in California. I am almost certain that it was not at UCSD though I could be wrong. This would be about fifteen years ago. One person from the audience was asking what I regarded as "too many questions" and making somewhat "long-winded remarks". I turned to my neighbor and whispered to him, "Who is this old guy?" My neighbor---I don't recall who it is---said, "That is Marshall Rosenbluth, and I am sure he will not appreciate your calling him an old guy." I blushed at my own youthful outburst so much that, even at the end of the talk when Marshall lingered on for a bit, I did not bring myself to be introduced to him.

Not long after that, I gave an invited talk at one of the Plasma Physics meetings of the American Physical Society, and Marshall privately was kind to make a complimentary remark about the talk. I was elated even if he may have meant it as a mere courtesy. That was the last time I saw him. I am positive that I made no particular impression on him, but I began bumping into his work often. I got to know of it a bit better also in indirect ways. For instance, my former colleague, Ira Bernstein, interviewed for the position of the Director of the Plasma Physics Institute in Texas after Marshall left, and I got to learn from Ira some of Marshall's work in that connection. Some of you have on occasion educated me about Marshall's work as well. The basic facts are shown in this slide.

The last time I ran into Marshall's work was when the Science magazine published a critical article on the prospects of ITER. I will not go into the details of the article now, but it had to do with a numerical study from Texas of certain small-scale instabilities that could enhance plasma transport, and thus make the technical evaluation of ITER's performance, which is necessarily an extrapolation, too optimistic. Here is an extract from that article.