



Frank Wolfs

I like to welcome everyone to the John Huizenga Symposium in honor of John's 85th birthday. The Department of Physics and Astronomy has benefited enormously from the ties between John and our Department. Several examples of collaborative projects between John and our Department already have been mentioned by Doug. In the next few minutes, I will talk about how John has impacted my life.

The first time I heard about the John Huizenga we honor today was as an undergraduate student in Holland in the early 1980's. In one of our nuclear physics courses, which focused on heavy-ion physics, we read *Damped Heavy-Ion Collisions* by Udo Schröder and John Huizenga, published in the Annual Review of Nuclear Science. It is of course not a surprise that a typical Dutch name, such as Huizenga, stays in your mind. The name Huizenga appears to have originated in the provinces Friesland and Groningen, which is where I was studying Physics at that time. These days of course, Huizengas can be found all over Holland and all over the world; I gave up trying to count the number of Huizengas in Holland since there were just too many.

After moving to Chicago as a graduate student in 1983, I became more and more impressed by the work of John and Udo, who, without any doubt, were the world experts in neutron detection and the use of neutrons as probes of nuclear dynamics at intermediate energies. The classic work from that period was *Damped Nuclear Reactions*, which was published in Treatise on Heavy-Ion Science. Although my own work did not involve neutron detection, the development of a complete picture of heavy-ion reactions, which was part of my Ph.D. project, required a complete understanding of all reaction channels, and the understanding of the damped component is an important part of this picture.

My appreciation for John's work increased even further in the late 1980's when the cold fusion fury started. As a post-doc at Argonne National Laboratory I worked with a few others on trying to reproduce the effect. Although I had a lot of experience detecting charged particles and gamma rays, I had very little direct experience with neutron detection. Every day the Physics Division Director would come to see why we still were not able to reproduce this effect while everyone else could; my standard reply was "we just do not know what we are doing." With that I referred to the detection of neutrons; we struggled with sensitivities of our counters to temperature, our poor understanding of the detection efficiency of our detectors which we needed to know in order to be able to make absolute measurements, and many other issues. Detecting neutrons, which is what John and Udo did for a living, was awfully difficult! The rest of the story is of course known to all: John lead the effort by the Department of Energy to get to the bottom of the problem which became known as the fiasco of the century.

Unfortunately, after coming to Rochester in 1990, I did not really have the opportunity to work directly with John and this is something I will always regret.

John, many may wonder what the secret is of your success and longevity. To me it is very clear; your Dutch heritage is responsible for it. As a token of my appreciation of what you have done for us, I like to give you this gift from the country where your genes were brewed;

John gefeliciteerd met je vijf en tachtigste verjaardag.