## SESSION V: BEAM EXTRACTION

## T. A. Welton, Chairman

## Introductory Comments

I don't think any particular introductory remarks are called for. I have many friends who are connected with Van de Graafs and linear accelerators, and whenever I try to give them a sales talk on the virtues of cyclotrons and have nearly won the argument they always come back with "But don't you think it is nice to get a beam that comes straight out of the machine?"

I have never had much luck with the reply, "Well, don't you think it is nice to have a compact machine that makes the beam go around in a circle?" [Laughter]

I think the real answer is the one that we have already heard a fair amount about, incidentally, in this conference. We will hear some more now, and I hope in the next few years we will see the development of beam extraction for cyclotrons that really puts them on a par as far as convenience is concerned with the linear machines.