

Zeitschrift: Helvetica Physica Acta
Band: 23 (1950)
Heft: [3]: Supplementum 3. Internationaler Kongress über Kernphysik und Quantenelektrodynamik

Artikel: Discussion following the report of E. Segrè on "Recent developments of ionisation chambers"
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DOI: <https://doi.org/10.5169/seals-422263>

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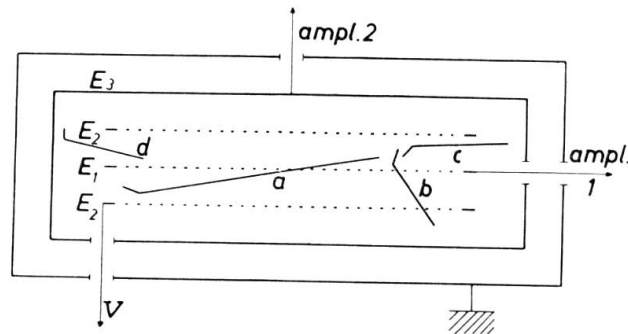
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**Discussion following the report of E. Segrè
on „Recent developments of ionisation chambers”**

W. BOTHE, Heidelberg: An ionisation pulse chamber of special design for studying (n, α) - and (n, p) -reactions in gases after the Wilhelmy method is in use in our laboratory since some time (Fig.). The main chamber consists of the collecting grid E_1 , connected to a linear amplifier (1), and the voltage grids E_2 . The main chamber is surrounded by an auxiliary chamber, the second collecting electrode E_3 being connected to a second amplifier (2). The two collect-



ing systems are connected in anticoincidence. When a particle released by a neutron in the gas filling hits the “wall” of the main chamber from either side (b, c, d) it will not be recorded, because amplifier 1 is blocked by amplifier 2, so “wall effects” are suppressed. Moreover, since the main chamber is rather flat, it is possible, by adjusting the gas pressure, to select only particles running in a direction nearly normal to the electric field (track a).

In this way the background of resonance energy spectra is greatly reduced, so Dipl. Phys. W. STETTER could observe a number of new levels of the N^{15} -nucleus.