

Fig. 1 – Schematic description of exotic nuclear radioactivities.

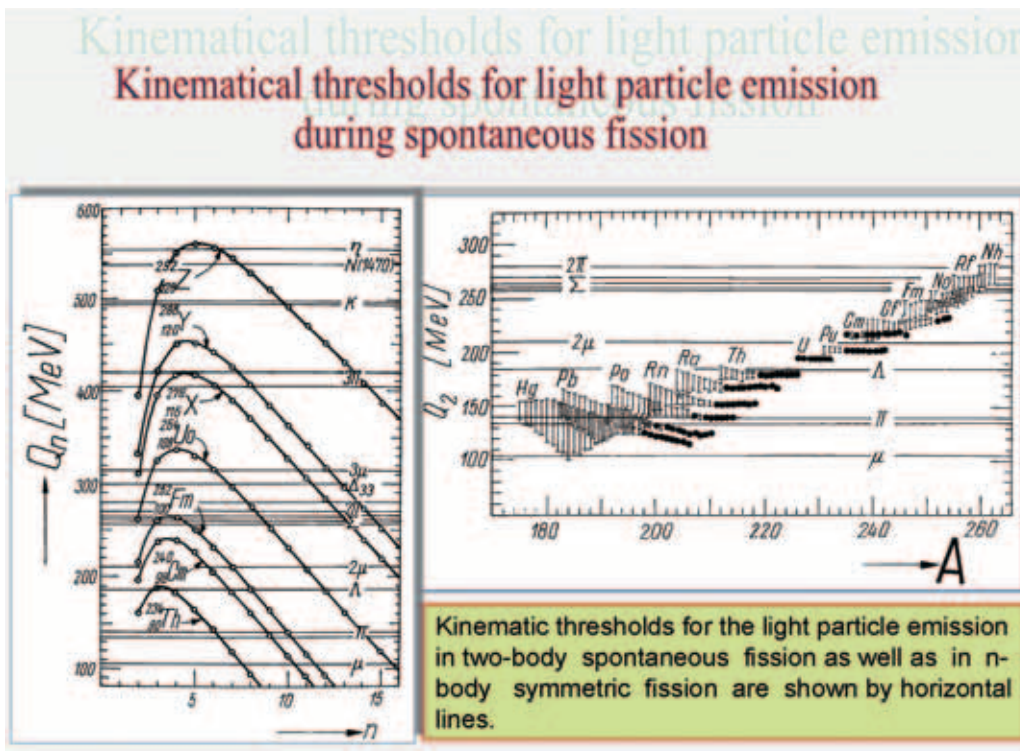


Fig. 2 – Q_n -energies liberated in a symmetric n-body fission and Q_2 -energies liberated in a two-body spontaneous fission. The horizontal lines correspond to the kinematical thresholds for the light particles emission during fission.

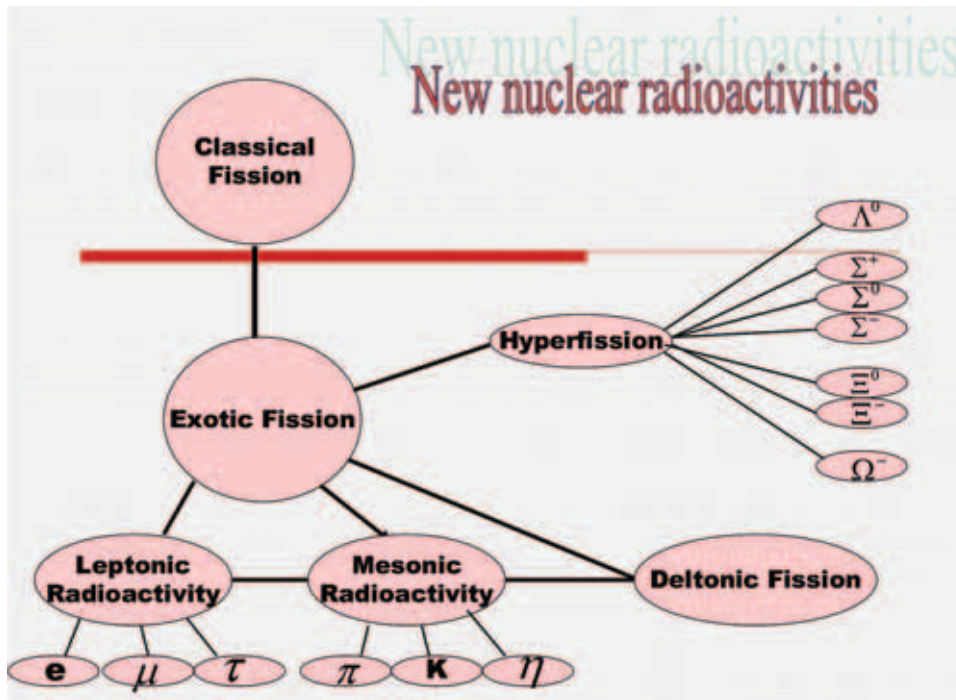


Fig. 3 – New exotic nuclear radioactivities.

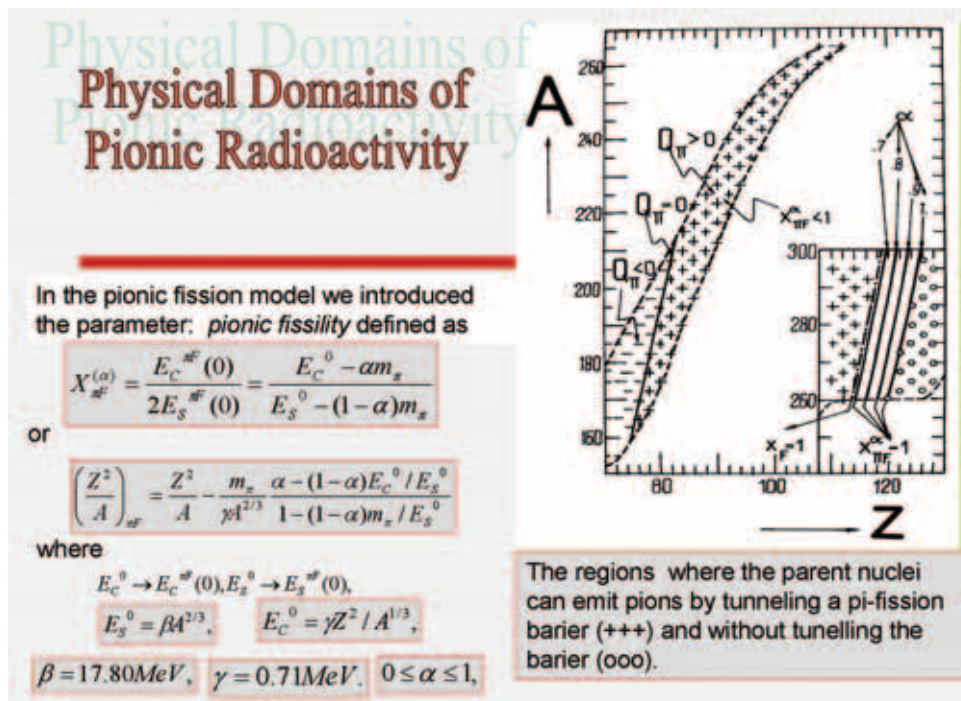


Fig. 4 – Physical regions for the pionic radioactivity.

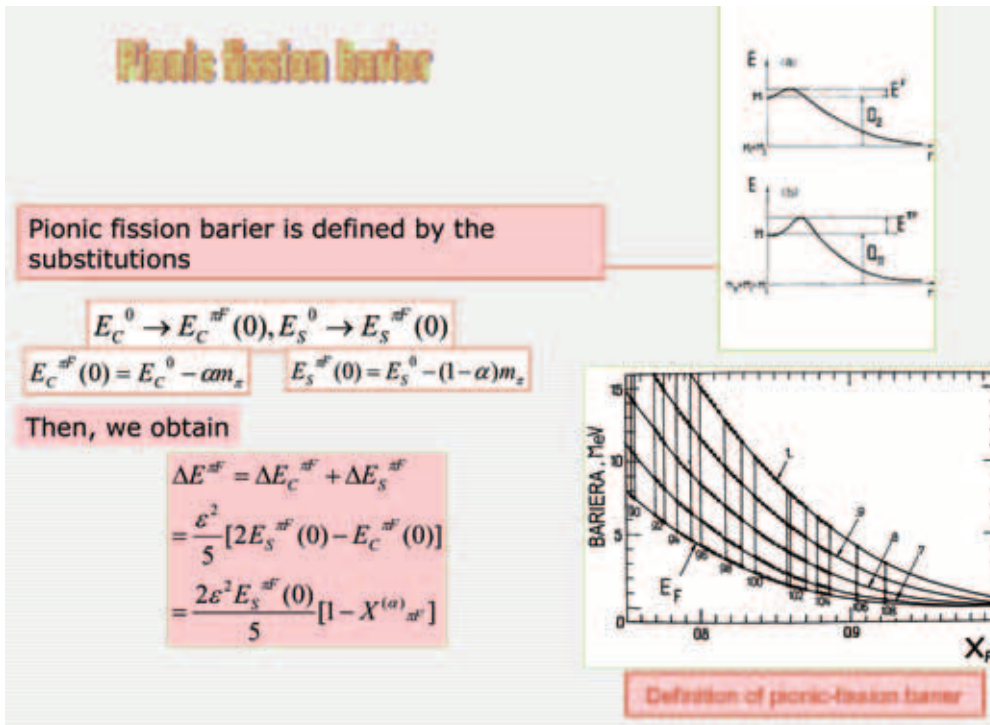


Fig. 5 – Barrier height for pionic fission.

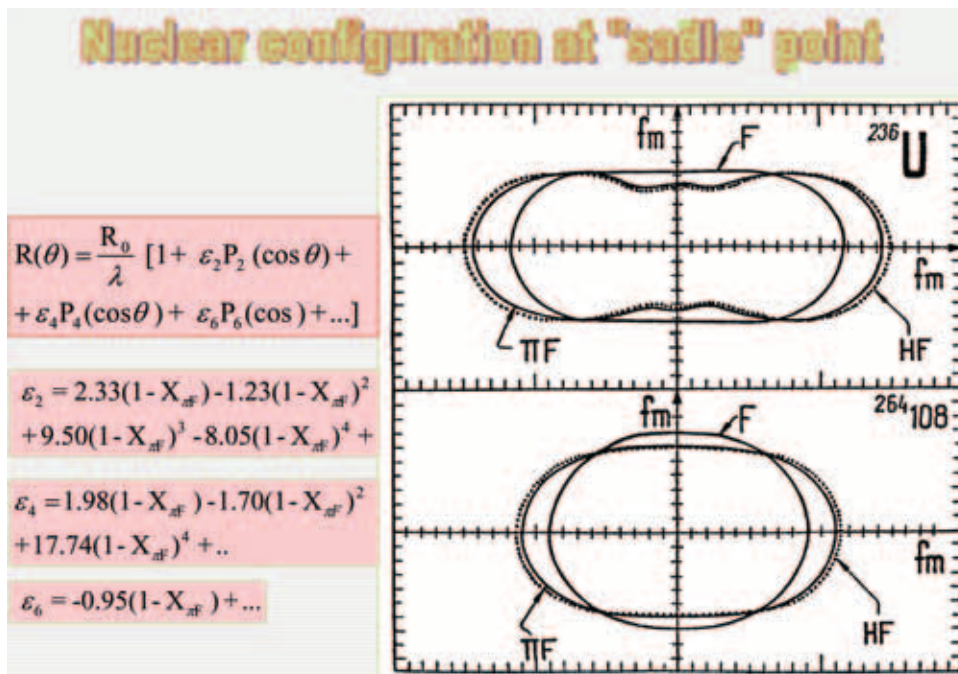


Fig. 6 – The nuclear configuration at the saddle point for spontaneous fission (F), spontaneous hyperfission (HF) and spontaneous pionic fission (πF).

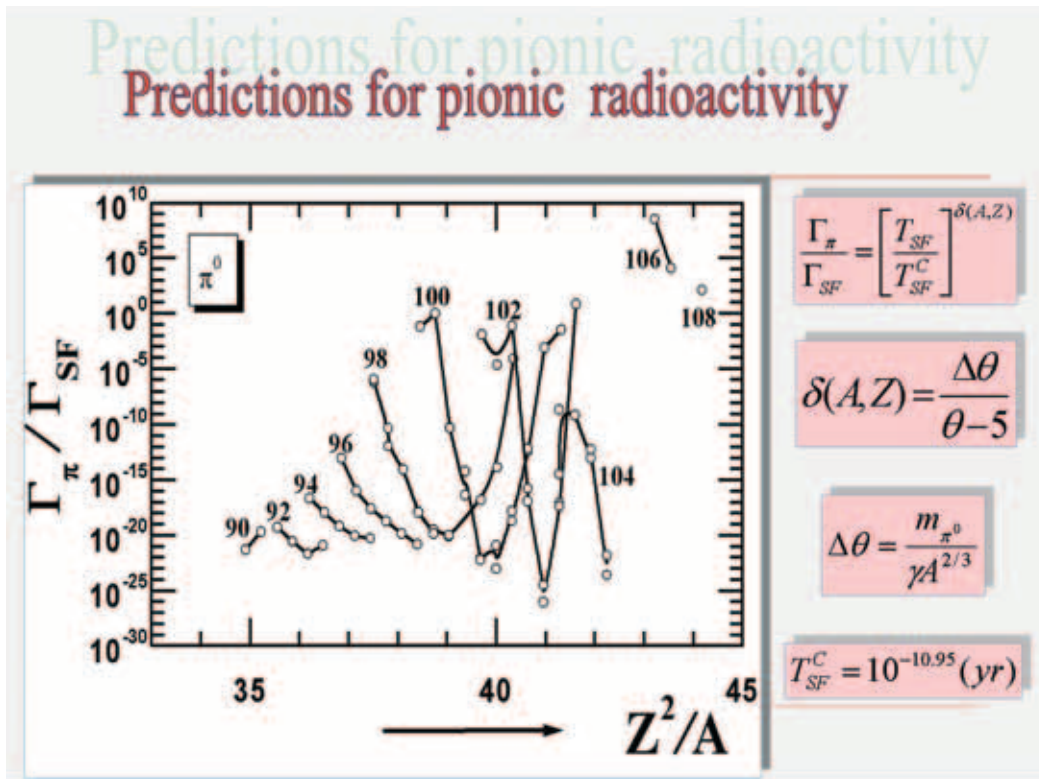


Fig. 7 – Predictions for π^0 -spontaneous emission during fission of heavy and superheavy nuclei.

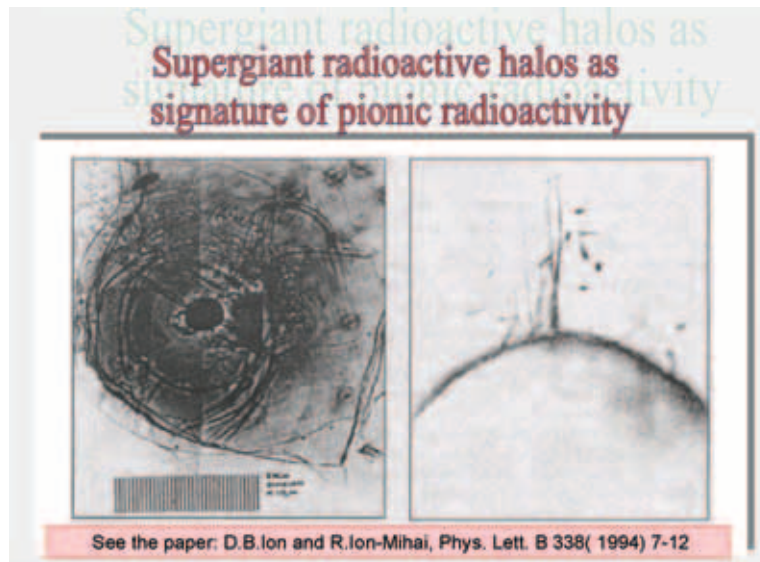


Fig. 8 – A photomosaic of a part of one supergiant halos (SGH) F-12 discovered by Grady and Walker [51].

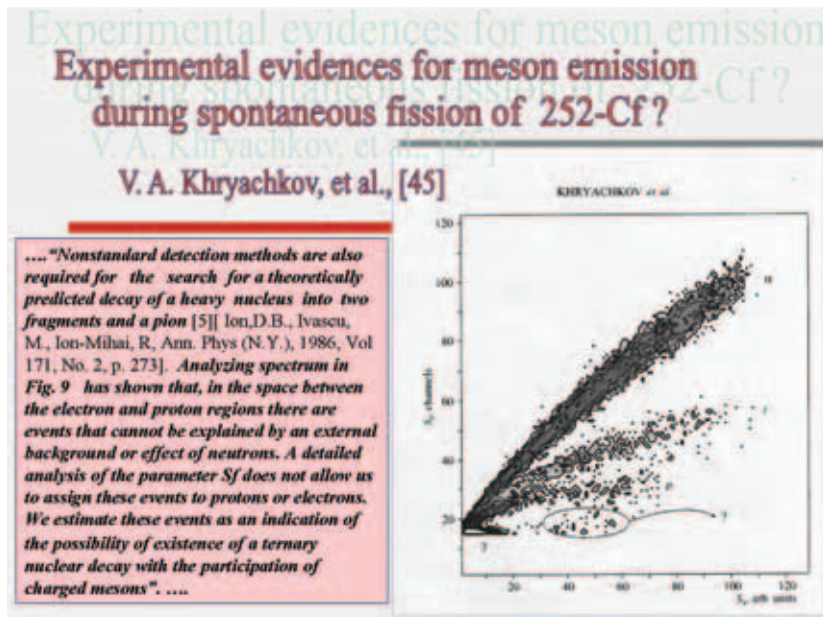


Fig. 9 – The experimental results (see Fig. 9 in Ref. [45]) on the light charged particle emission during the spontaneous fission of ^{252}Cf .

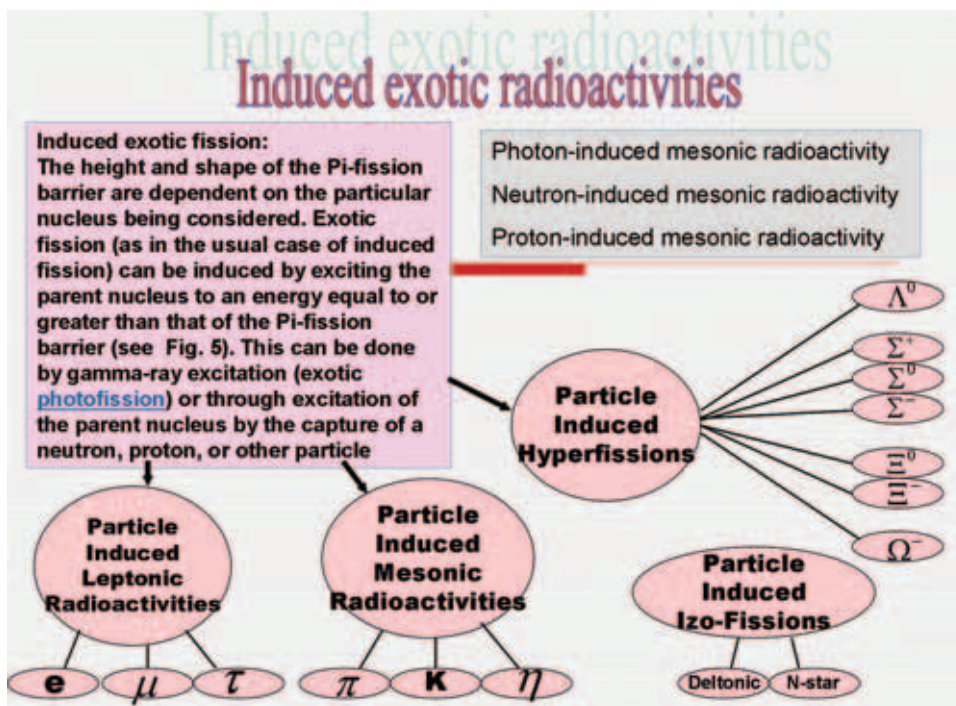


Fig. 10 – Schematic description of possible new exotic induced radioactivities.