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**FIGURE CAPTIONS**

**Fig. 1.** The geometry of two colliding nuclei. The origin of coordinates is at the centre of nucleus 2. The nucleus 1 moves uniformly on a straight line parallel to the y-axis with velocity $v$. The distance of closest approach $d$ is reached at $t = 0$. The surface $\Sigma$ is explained in the text.

**Fig. 2.** The nuclear barrier along the z-axis. The distance between the centres of the nuclei is $d_1 + d_2 = s + R_1 + R_2$, where $d_i$ ($i = 1, 2$) is the distance to the surface $\Sigma$ explained in the text, $R_i$ the nuclear radii and $s$ the distance between surfaces. $b_i$ are the turning points of the single particle level.
Fig 1. BRINK & STANCU