CZ2003 Tutorial 6 (Electronic week)

Blobby shapes

1. Using FVRML, experiment with blobby objects and understand what parameters in the blobby function affect the object size and shape.

2. Using FVRML, propose a function alternative to blobby object function but such that it does not use exponent function e^n that is quite heavy for calculations

   $g = f(x,y,z) = ae^{-r}$

   where

   $r = (x - x_b)^2 + (y - y_b)^2 + (z - z_b)^2$

   The proposed function must work in a similar way for making soft shapes that consist of several shapes, each defined by its individual function, while their algebraic sum defines the whole shape, as illustrated in Figure Q1.

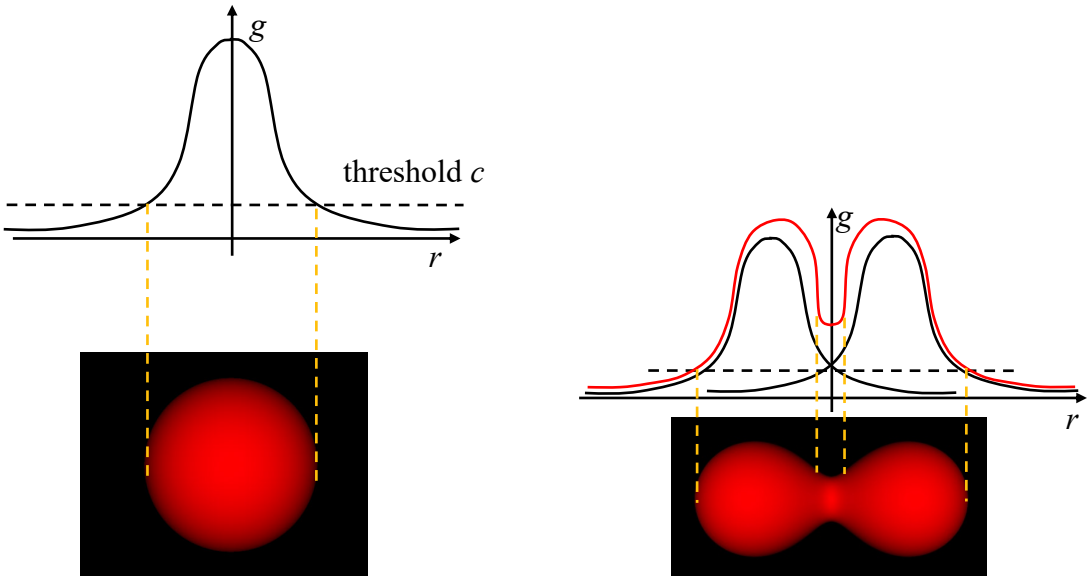

Figure Q1