

**1.** Top Left: if an object falls on a hair (pivot) it's motion gets to be redirected.



**2.** Top Middle: a hair/pivot is actually the same as a ball-roller, because it causes what falls on it to turn along the rotating pivot point towards the side, see the comparison to a transport-band and a line of hairs.



**3.** Middle: The 'classical' comparison to hairs on the outside for Soap Bubbles and Cell Membranes, and the comparison to a continuous track and a caterpillar with her many feet 'sliding' over the ground.



Cellmembraan











Bloedcellen

Caterpillar / Rups

**4.** Bottom Left: imagining a body having a rollers as an shield-armor, and just replacing it with hair(s) as it has the same deflecting quality.



**5.** Bottom Middle (contact): An interesting thing is that when two 'hairy' objects meet and collide; one is always standing still in relation to the other, this causes for harmonization when they come in contact ///// where the hairs are laid down in opposite directions and everything is smooth, as if they're blown backwards by the wind, they don't go agains the grain. Next to it on the right, are two colliding bodies and the dot's of the dotted line indicate the steps of sliding (pivoting & turning) vs. just a regular bounce.





As an example you can rub your forearms over eachother, a bit like the woman in the picture below, and you'll sense how the hairs on your arms are in harmony depending on which way you move, right up vs the left arm (smooth/slippery) <=> right down vs. left (friction/ non-slippery)

6. This shade-align-thing might perhaps be fixed with a Shader.

\*\* For example in the case of those 3 poles, see the sun at different settings as the incoming body/ particle and how far it would slide, depending on its position and force. \*\* (long - medium - short) ... sundial sort of technique/trick.



**7.** A shader could also cast a shadow that indicates a direction over a surface, so perhaps next to the regular sph-tools of incompressibility, friction and cohesion; a kind of Shade (Slip-path-direction-definer) might perhaps be added, that indicates how long particles would slide over each other vs. the stickiness of viscosity.





**8.** Bottom Middle: There's again the thing of how a plate would interact with a pivot-pole; as the flat-squared-plane would Tilt and slide along the hair and be launched back upwards  $\ldots$  / - Same for the the little in-flying 0val next to it.



