

```
function y = stick(i,j,on)
% Calculates if two clashing clusters will stick.
global Ve k x Fmax T norm_ma kb

if on == 1

Lo = 1/(pi*(1.28E-6)^2*(sum(x(2,:,:k))/Ve));%mean free path
Fo = Fmax/1000;

m_12 = norm_ma*i*j/(i+j);
v_12 = 8*kb*T/(pi*m_12);

Ek = 0.5*(i+j)*v_12^2;

Eglue = 2 * Fmax * log(Fmax/Fo)/Lo * exp(Lo);

if Ek < Eglue
    y = 1;
else
    y = 0;
end

else
    y = 1; %guaranteed stick if "energy-dependent adhesion module" is off
end

end
```