

**Variable Surface Refrigerator**

António Saraiva – 2009-08-02  
ajps2@hotmail.com

See Unified Absolute Relativity Theory at:

<http://www.wbabin.net/saraiva/saraiva105.pdf>  
<http://www.wbabin.net/saraiva/saraiva223.pdf>

**Abstract** – The temperature, like surface tension, is an energy surface density.

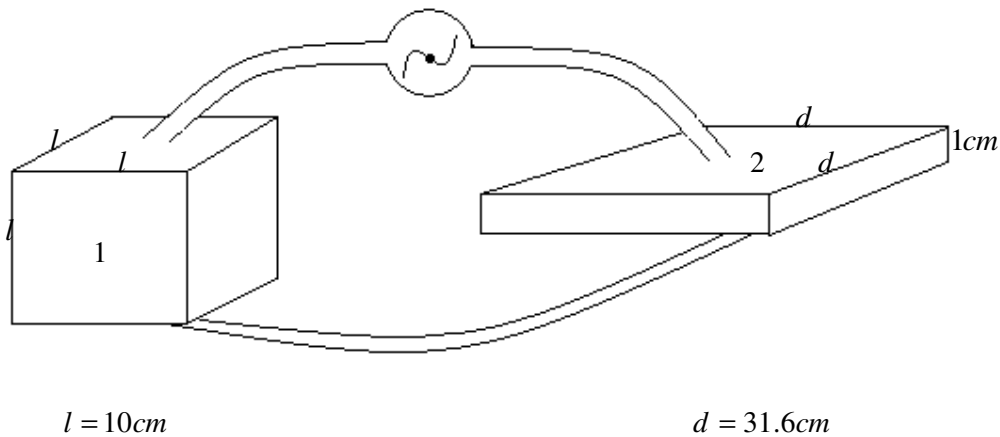
$$T = \frac{E}{A}$$

T – Temperature; E – Energy; A – Area or surface

$$\Leftrightarrow \Delta T = \frac{T}{A} \Delta A$$

$$T = 15^\circ C ; A_1 = 600cm^2 ; A_2 = 2100cm^2 ; \Delta A = 1500cm^2$$

$$\Leftrightarrow \Delta T = 10.7^\circ C$$



Volume:  $V_1 = V_2$

The system has two metallic boxes with equal volumes and different surfaces.  
A pump makes the fluid circulate between the two boxes.  
The temperature in (1) becomes  $20.3^\circ C$  and in (2)  $9.6^\circ C$ .