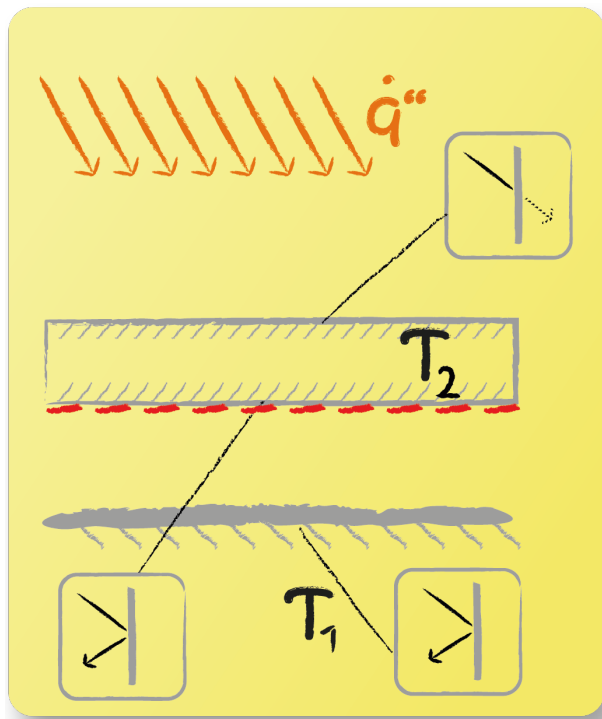# Surface Brightness: Task 27

The image shows two grey bodies. The properties of body 2s bottom and top surfaces differ from each other. While radiation arriving at the top is transmitted but not reflected, radiation on the bottom is reflected but not transmitted. Bottom and top surfaces are indicated by indices b and t.

1

$$\dot{Q}_{2b} = \sigma \cdot \epsilon_{2b} \cdot A_2 \cdot T_2^4 + \rho_{2b} \cdot \dot{Q}_1 + \tau_{2t} \cdot A_2 \cdot \dot{q}''$$

2

The surface brightness of body 2's bottom is composed of its emission, reflection of body 1's surface brightness and transmission of the specific radiation $\dot{q}''$.