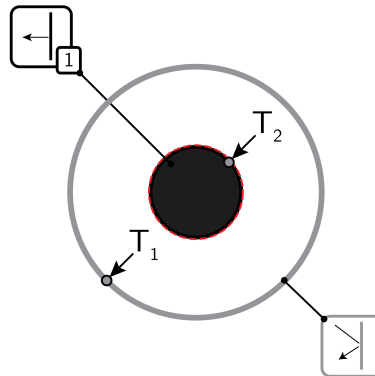# EB - Rad. - Net 01

Write the net heat flux between object 1 and object 2. $\dot{Q}_{1\leftrightarrow2}$. Use view factors and surface brightness whenever possible.

Definition of the net heat flux:

$$\dot{Q}_{1\leftrightarrow2} = \Phi_{12}\dot{Q}_1 - \Phi_{21}^{1}\dot{Q}_2$$

Heat fluxes:

The surface brightnesses of bodies 1 and 2 will be determined in a separate task and can be stated as $\dot{Q}_1$ and $\dot{Q}_2$ respectively.

Substituting and rewriting:

$$\dot{Q}_{1\leftrightarrow2} = \Phi_{12}\dot{Q}_1 - \dot{Q}_2$$