

## LIST OF FORMULAS TO SECTIONS 2 AND 3

$$\left\| \begin{array}{c} 2(gh) \\ 3.M \\ 3.P \end{array} \right\| \left| \begin{array}{l} \mathbb{R}^2 \ni \lambda \mapsto \langle \lambda, f \rangle = \lambda_1 f_1 + \lambda_2 f_2 : \Omega \rightarrow \mathbb{R} \\ L \ni f : \Omega \rightarrow \mathbb{R} \\ K \ni h : \Omega \rightarrow \mathbb{R}; \quad f = -\beta h \end{array} \right. \left| \begin{array}{l} \mathbb{R}^2 \ni \lambda \mapsto \Lambda(\lambda) = \ln \int e^{\langle \lambda, f \rangle} d\mu \\ L \ni f \mapsto \Lambda(f) = \ln \int e^f d\mu \\ \Lambda(-\beta h) = \ln \int e^{-\beta h} d\mu \end{array} \right. \left| \begin{array}{l} \text{grad } \Lambda(\lambda) \in \mathbb{R}^2 \\ \text{grad } \Lambda(f) \in L^* \\ \text{grad } \Lambda(-\beta h) = x \in L^* \end{array} \right. \right\|$$

$$\left\| \begin{array}{c} 2(gh) \\ 3.M \\ 3.P \end{array} \right\| \left| \begin{array}{l} \mathbb{R}^2 \ni a \mapsto \Lambda^*(a) = \sup_{\lambda \in \mathbb{R}^2} (\langle \lambda, a \rangle - \Lambda(\lambda)) \\ L^* \ni x \mapsto \Lambda^*(x) = \sup_{f \in L} (\langle f, x \rangle - \Lambda(f)) \end{array} \right. \left| \begin{array}{l} \Lambda^*(\text{grad } \Lambda(\lambda)) = \langle \lambda, \text{grad } \Lambda(\lambda) \rangle - \Lambda(\lambda) \\ \Lambda^*(\text{grad } \Lambda(f)) = \langle f, \text{grad } \Lambda(f) \rangle - \Lambda(f) \\ S(x) = -\Lambda^*(x) = \beta \langle h, x \rangle + \Lambda(-\beta h) \end{array} \right. \right\|$$

$$\left\| \begin{array}{c} 2(gh) \\ 3.M \\ 3.P \end{array} \right\| \left| \begin{array}{l} \nu = \exp(\langle \lambda, f \rangle - \Lambda(\lambda)) \cdot \mu \\ \nu = \exp(f - \Lambda(f)) \cdot \mu \\ \nu = \frac{e^{-\beta h} \cdot \mu}{\int e^{-\beta h} d\mu} \end{array} \right. \left| \begin{array}{l} \nu^n = \exp n(\langle \lambda, f^{(n)} \rangle - \Lambda(\lambda)) \cdot \mu^n \\ \nu^n = \exp n(f^{(n)} - \Lambda(f)) \cdot \mu^n \\ \nu^n = \frac{e^{-\beta nh^{(n)}} \cdot \mu^n}{\int e^{-\beta nh^{(n)}} d\mu^n} \end{array} \right. \left| \begin{array}{l} \int g d\nu = \text{grad } \Lambda(\lambda) \\ \int g d\nu = \langle g, \text{grad } \Lambda(f) \rangle \\ \int g d\nu = \langle g, x \rangle \end{array} \right. \right\|$$

“2(gh)” means: Section 2, subsections 2g and 2h;  
 “3.M” means: Section 3, the mathematical style;  
 “3.P” means: Section 3, the physical style.