Test the isomath Package

Fontpackage: [garamond]{mathdesign}
Isomath called with options: [OMLmathrm,OMLmathbf,]
Default font families: serif `mdugm` sans-serif `cmss`
isomath-serif `mdugm` isomath-sf `cmbr`

Math alphabets

If there are other symbols in place of Greek letters in a math alphabet, it uses T1 or OT1 font encoding instead of OML.

mathnormal	$A, B, C, \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega, \alpha, \beta, \pi, \nu, \omega, v, w, a, g,$
mathit	$A, B, C, \grave{}, \acute{}, \hat{}, \tilde{}, \ddot{}, \dot{}, \mathring{}, \bar{}, \breve{}, \dot{}, ,, ¿, ı, !, v, w, a, g,$
mathrm	$\mathrm{A, B, C, \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega, \alpha, \beta, \pi, \nu, \omega, v, w, a, g,}$
mathbf	$\mathbf{A, B, C, \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega, \alpha, \beta, \pi, \nu, \omega, v, w, a, g,}$
mathsf	$\mathsf{A, B, C, \grave{}, \acute{}, \hat{}, \tilde{}, \ddot{}, \dot{}, \mathring{}, \bar{}, \breve{}, \dot{}, ,, ¿, ı, !, v, w, a, g,}$
mathtt	$\mathtt{A, B, C, \grave{}, \acute{}, \hat{}, \tilde{}, \ddot{}, \dot{}, \mathring{}, \bar{}, \breve{}, \dot{}, ,, ¿, ı, !, v, w, a, g,}$

New alphabets bold-italic, sans-serif-italic, and sans-serif-bold-italic.

mathbold	$\boldsymbol{A, B, C, \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega, \alpha, \beta, \pi, \nu, \omega, v, w, a, g,}$
mathsans	mathsans not defined, use `OMLmathsans` option
mathboldsans	$\boldsymbol{\mathsf{A, B, C, \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega, \alpha, \beta, \pi, \nu, \omega, v, w, a, g,}}$

Do the math alphabets match?
$ax\alpha\omega ax\alpha\omega ax\alpha\omega \quad \boldsymbol{TC\Theta\Gamma TC\Theta\Gamma} TC\Theta\Gamma$

Vector symbols

Symbols for vectors are boldface italic: $\lambda = \boldsymbol{e}_1 \cdot \boldsymbol{a}$.

Matrix symbols

Symbols for matrices are boldface italic, too:[1] $\boldsymbol{\Lambda} = \boldsymbol{E} \cdot \boldsymbol{A}$.

Tensor symbols

Symbols for tensors are sans-serif bold italic,

$$\boldsymbol{\alpha} = \boldsymbol{e} \cdot \boldsymbol{a} \quad \Longleftrightarrow \quad \alpha_{ijl} = e_{ijk} \cdot a_{kl}.$$

The permittivity tensor describes the coupling of electric field and displacement:

$$\boldsymbol{D} = \epsilon_0 \boldsymbol{\epsilon}_r \boldsymbol{E}$$

[1] However, matrix symbols are usually capital letters whereas vectors are small ones. Exceptions are physical Quantities like the force vector $\boldsymbol{F}$ or the electrical field $\boldsymbol{E}$.