

# TensorizedBasis

---

Each multi-index  $\mu = [\mu_1, \mu_2, \dots, \mu_M]$  encodes a tensorized basis function for the parameter space of the form  $H_\mu = \prod_{k=1}^M H_k$  where the  $H_k$  are the orthogonal polynomials. The TensorizedBasis collects all information necessary to evaluate those basis functions, i.e. the set of multi-indices and the triple products of the form  $(y_m H_\mu, H_\lambda)$  for each  $m$  and  $\mu, \lambda$  in the set of multi-indices.

```
Modules = [ExtendableASGFEM]
Pages = ["tensorizedbasis.jl"]
Order = [:type, :function]
```