TensorizedBasis

Each multi-index $\mu = [\mu_1,\mu_2,\ldots,\mu_M]$ 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 μ, λ in the set of multi-indices as a sparse matrix. There are analytic formulas to evaluate these triple products in terms of recurrence coefficients, but it makes sense to store them for faster evaluation times.

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