Pensieve header: Full testing of all functions.

Startup

In[•]:=
```
SetDirectory["C:\\drorbn\\AcademicPensieve\\Projects\\SL2Portfolio2"];
<< KnotTheory`;
<< "../Profile/Profile.m";
<< "Engine-With-w.m";
<< "Objects-With-w.m";
<< "KT.m";
BeginProfile[];
PopupWindow[Button["Show Profile Monitor"],
 Dynamic[PrintProfile[], UpdateInterval → 3, TrackedSymbols → {}]]
```

... ParentDirectory: Argument File should be a positive machine-size integer, a nonempty string, or a File specification.

... ParentDirectory: Argument File should be a positive machine-size integer, a nonempty string, or a File specification.

... ToFileName: String or list of strings expected at position 1 in ToFileName[{File, WikiLink, mathematica}].

... ToFileName: String or list of strings expected at position 1 in ToFileName[{File, QuantumGroups}].

```
Loading KnotTheory` version of January 20, 2015, 10:42:19.1122.
Read more at http://katlas.org/wiki/KnotTheory.

This is Profile.m of http://www.drorbn.net/AcademicPensieve/Projects/Profile/.

This version: June 2018. Original version: July 1994.
```

» Warning: On Sep 4 2019 I swapped the operations
$\in$ and η. Some incompatibilities may arise in older notebooks.

Out[•]= Show Profile Monitor

In[•]:=
```
$k = 0; ħ = γ = 1;
```

Utilities

In[•]:=
```
HL[ℰ_] := Style[ℰ, Background → If[TrueQ@ℰ, , ]];
```

Testing

In[•]:=
```
a2w_i // w2a_i
```

» dah

... Power: Infinite expression $\frac{1}{0}$ encountered.

... Infinity: Indeterminate expression $e^{\text{ComplexInfinity}}$ encountered.

```
» EQ$6352[0, 0, 0, 0]
```

```
» 𝔼[(1 - T_i) α_i/(-1 + T_n$6351[i]) + a_i (-1 + T_i) α_i/(-1 + T_n$6351[i]) + t_i τ_i, Indeterminate, 1]
```

... Inverse: Input matrix contains an indeterminate entry.

```
Out[•]= 𝔼_{i}→{i}[(1 - T_i) α_i/(-1 + T_n$6351[i]) + a_i (-1 + T_i) α_i/(-1 + T_n$6351[i]) + t_i τ_i, Indeterminate,
  Det[Inverse[{{Indeterminate, Indeterminate}, {Indeterminate, Indeterminate}}]]]
```

```
In[•]:= 𝔼_{}→{i}[0, 0, a_i] // a2w_i
Out[•]= 𝔼_{}→{i}[0, 0, w_i/(-1 + T_i) + x_i y_i]
```

```
In[•]:= 𝔼_{}→{i}[0, 0, w_i] // w2a_i
Out[•]= 𝔼_{}→{i}[0, 0, 1 + a_i (-1 + T_i) - T_i + x_i y_i]
```

```
In[•]:= (𝔼_{}→{i}[0, 0, w_i] // w2a_i) // t2b_i // dm_{i,j→k}
Out[•]= 𝔼_{j}→{k}[a_k α_j + b_k β_j, y_k η_j + x_k ξ_j, (1 + a_k (-1 + B_k) - B_k + x_k y_k/𝒜_j + (2 - 2 B_k) y_k η_j) + O[∈]^1]
```

```
In[•]:= (𝔼_{}→{i}[0, 0, w_i] // w2a_i) // t2b_i // dm_{j,i→k}
Out[•]= 𝔼_{j}→{k}[a_k α_j + b_k β_j, y_k η_j + x_k ξ_j, (1 + a_k (-1 + B_k) - B_k + x_k y_k/𝒜_j + (2 - 2 B_k) x_k ξ_j) + O[∈]^1]
```