More Rappture Objects

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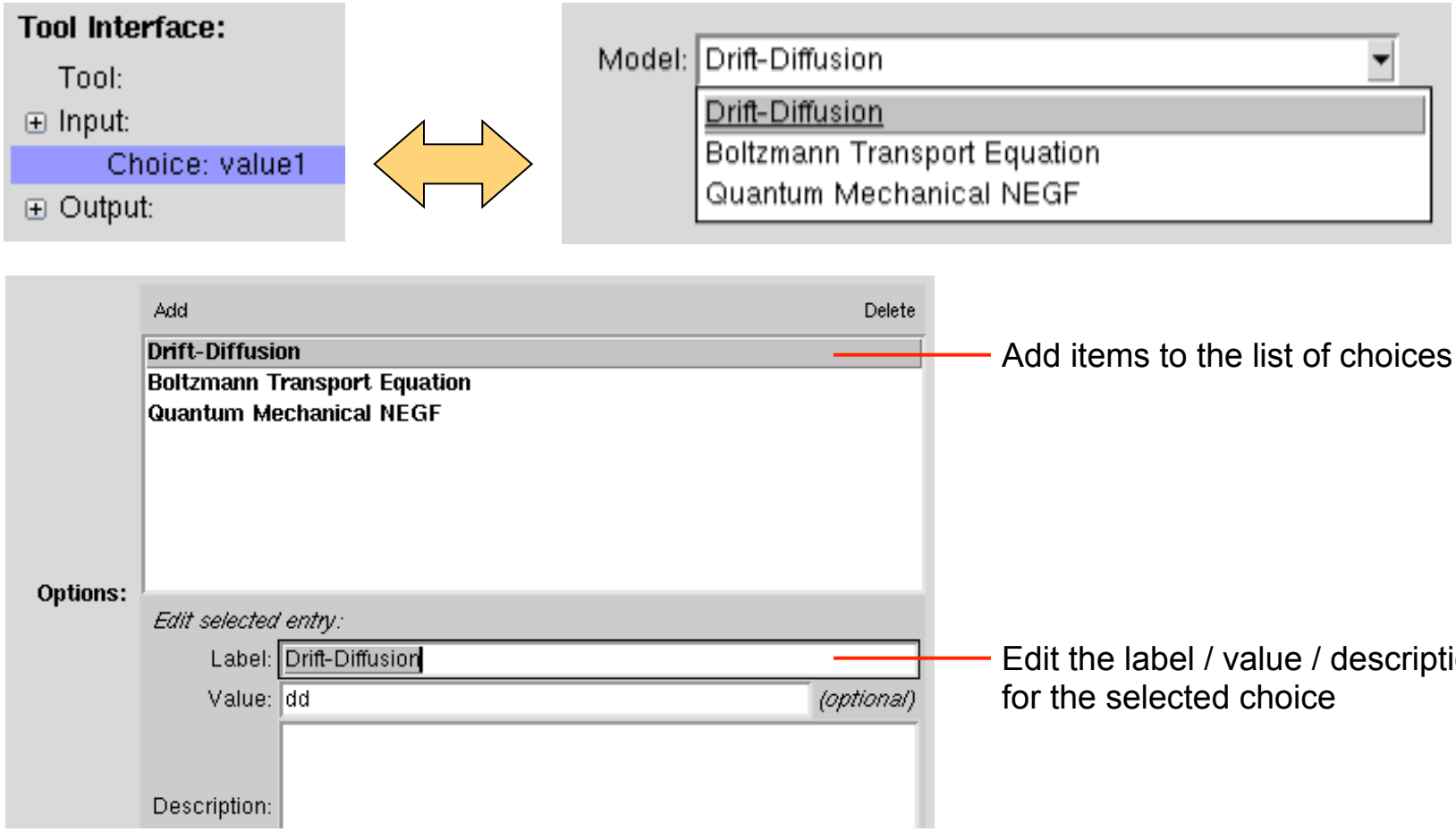
Choices



Atoms

Prompt for elements from the periodic table

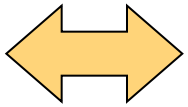
Tool Interface:

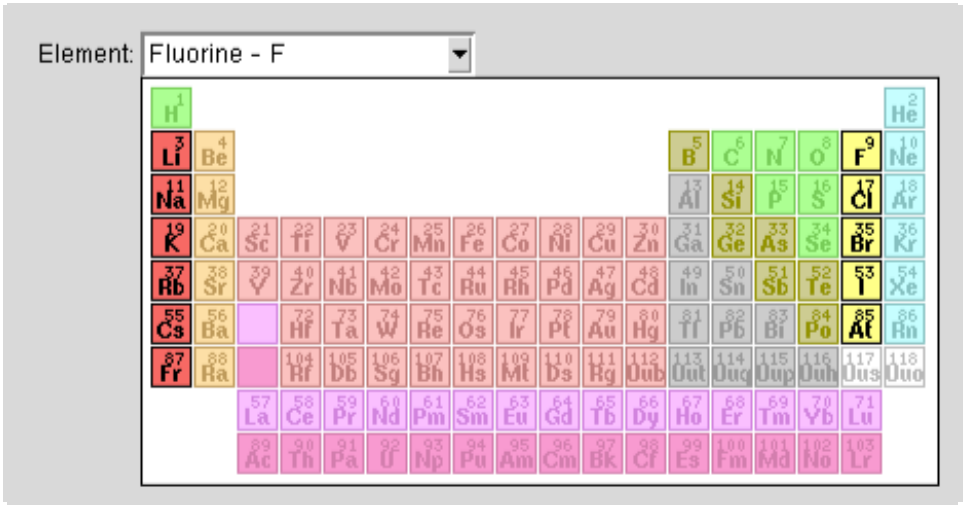
Tool:

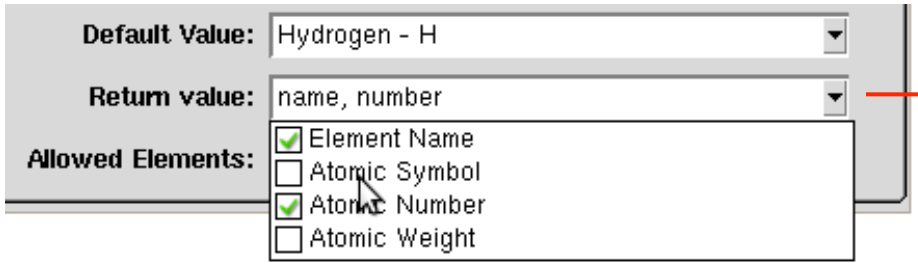
⊞ Input:

Periodicelement: value1

⊞ Output:





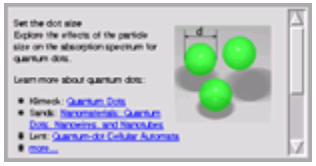


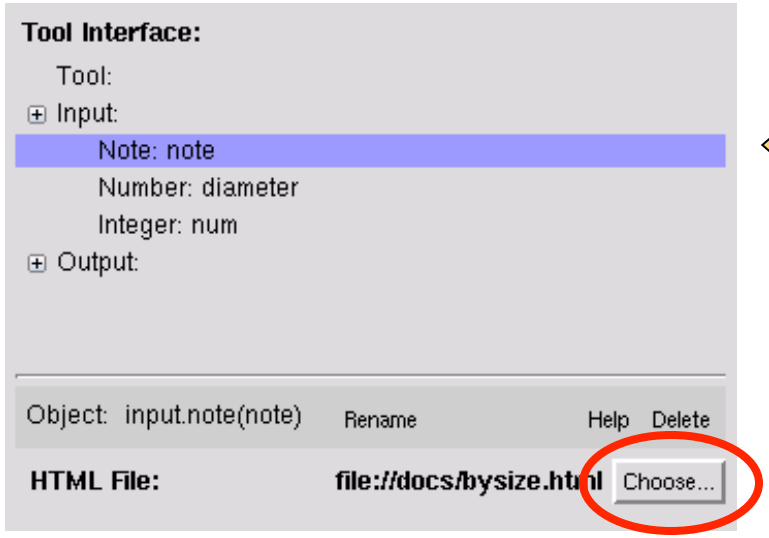
Controls what gets set as the <current> value for the selected element in your program

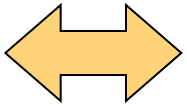
Enable or disable various sections of the periodic table

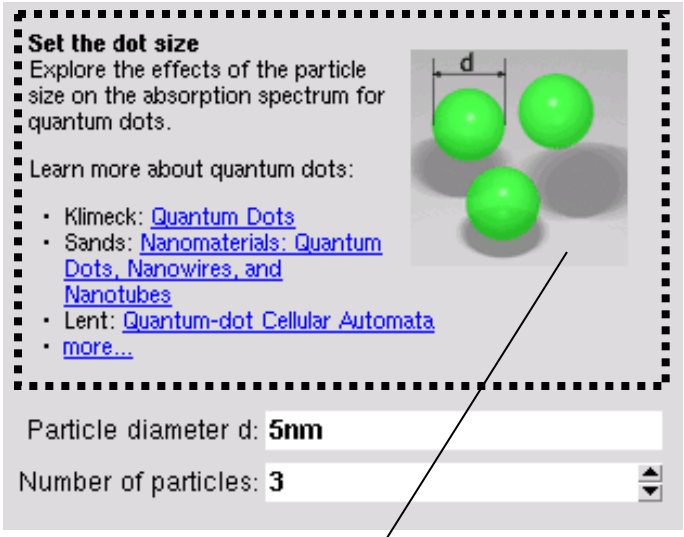
Notes

Use Note objects to embed documentation

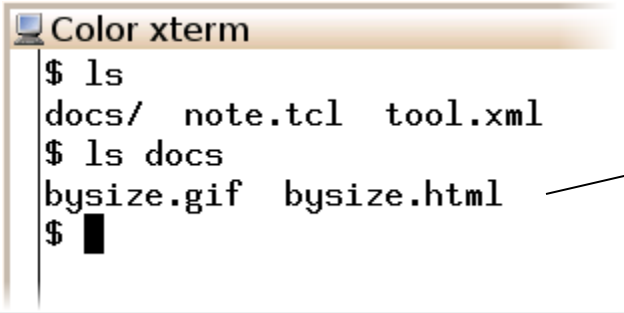








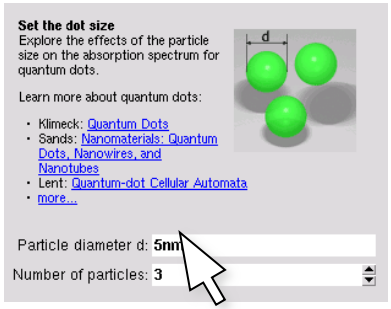
Set an ordinary HTML file



Can reference images and other HTML files in the same directory, or using absolute http:// paths

Notes

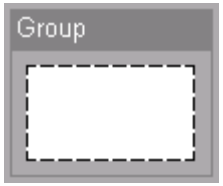
Note can pop up external web sites



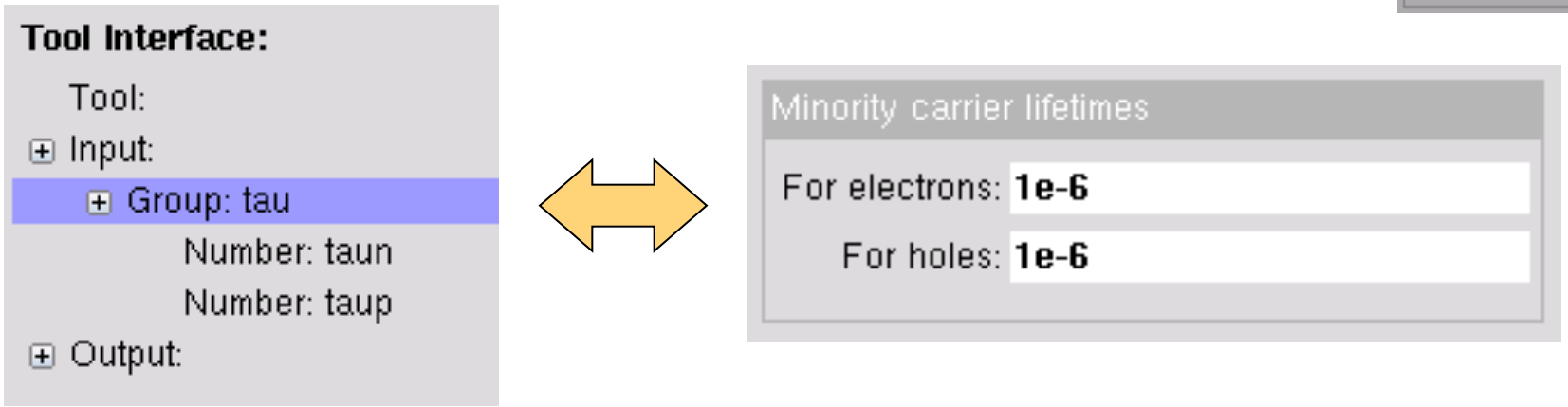
Example: bysize.html

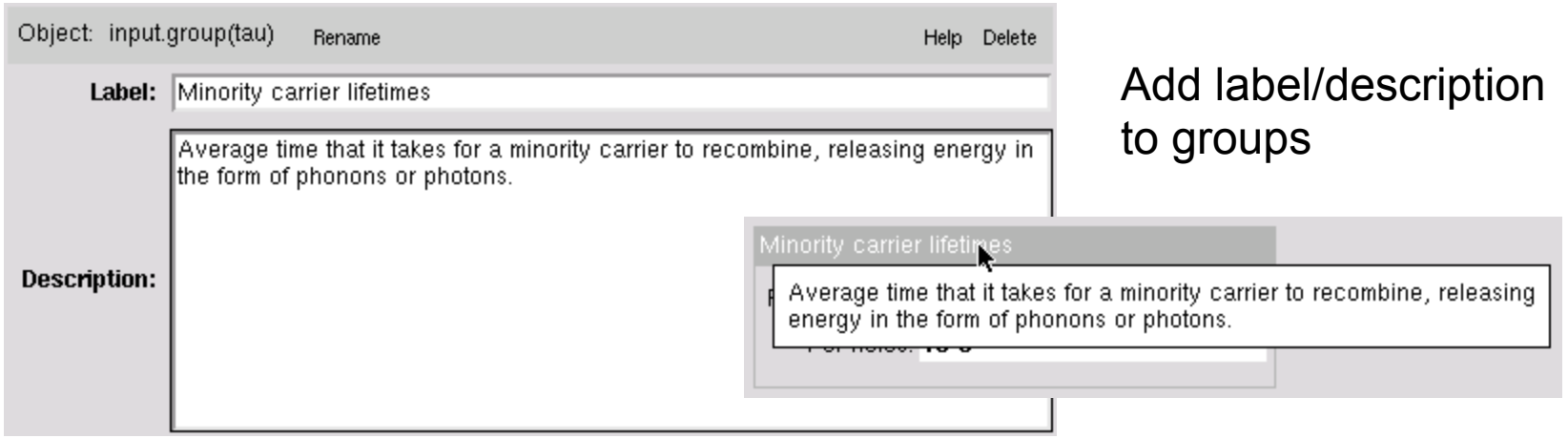
```
<html>
<body>
<p>
<img style="float: right; margin: 8px;" src="bysize.gif"/>
<b>Set the dot size</b><br/>
Explore the effects of the particle size on
the absorption spectrum for quantum dots.
</p><p>
Learn more about quantum dots:
<ul style="margin: 0px; padding-left: 16px;">
<li>Klimeck: <a href="http://www.nanohub.org/resources/189">Quantum Dots</a></li
<li>Sands: <a href="http://www.nanohub.org/resources/376">Nanomaterials:  Quantu
<li>Lent: <a href="http://www.nanohub.org/resources/148">Quantum-dot Cellular Au
<li><a href="http://www.nanohub.org/resources/tags/quantumdots">more...</a></li>
</ul>
</p>
</body>
</html>
```

Groups



Use Group objects to group inputs together



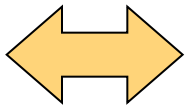


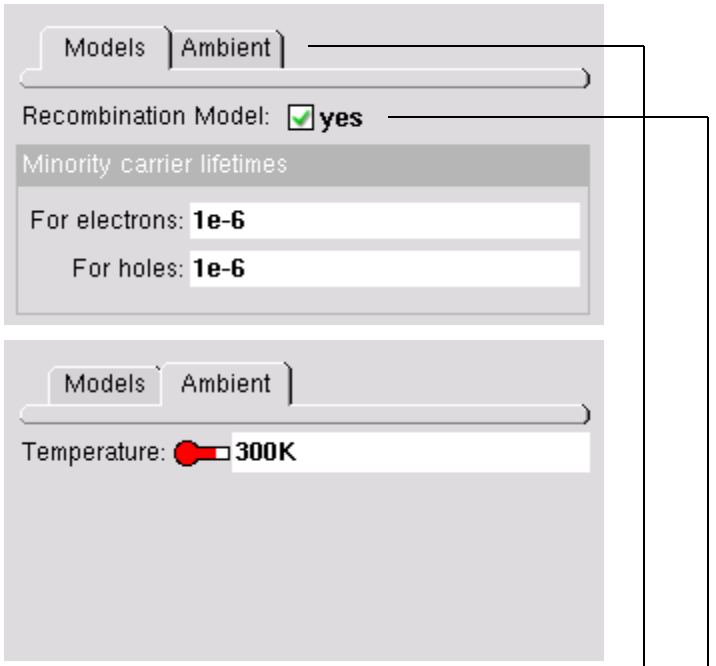
Add label/description to groups

Group of Groups

Tool Interface:

- Tool:
- ⊞ Input:
  - ⊞ Group: tabs
    - ⊞ Group: models
      - Boolean: recomb
      - ⊞ Group: tau
        - Number: taun
        - Number: taup
    - ⊞ Group: ambient
      - Number: temp





Group of just groups ⇒ tabs

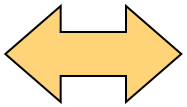
Group with other elements ⇒ box with group contents

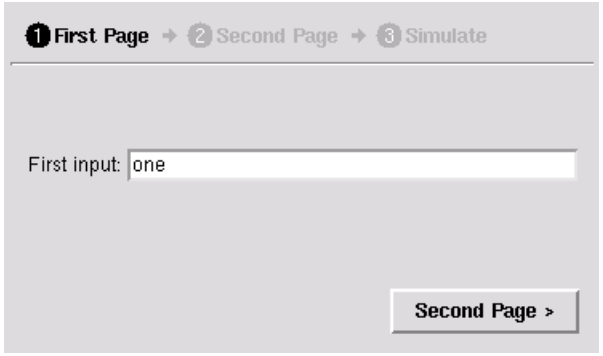
Phase

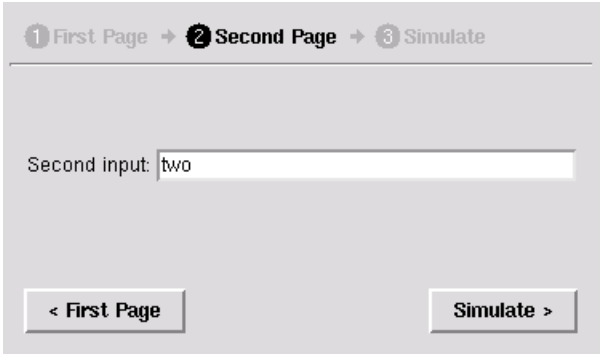
Use Phase objects to create input panels

Tool Interface:

Tool:
⊞ Input:
⊞ Phase: one
String: first
⊞ Phase: two
String: second



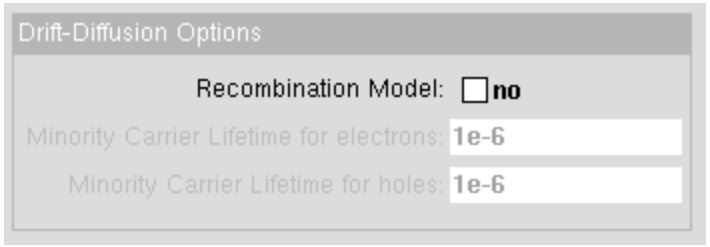


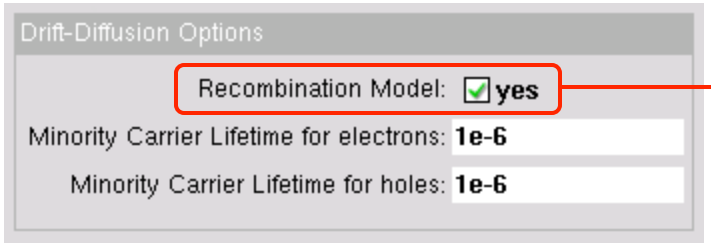


*** Use this sparingly--only if there are already lots of inputs and groups.**

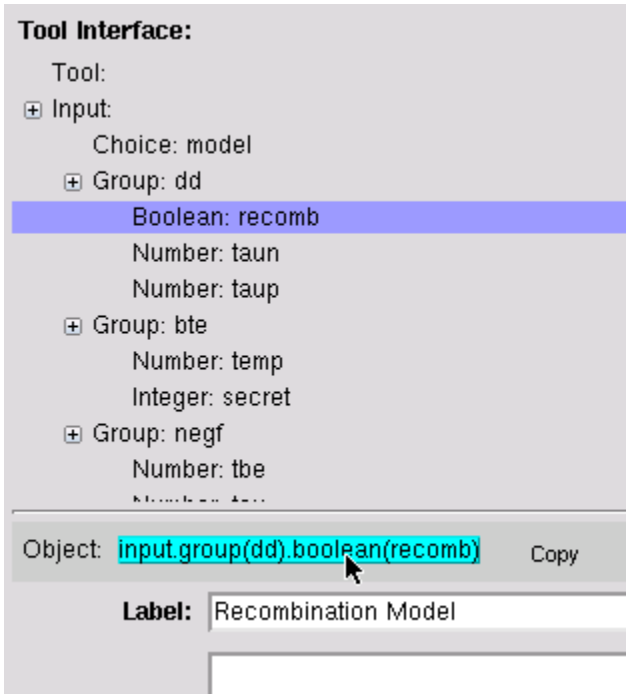
Enable/disable

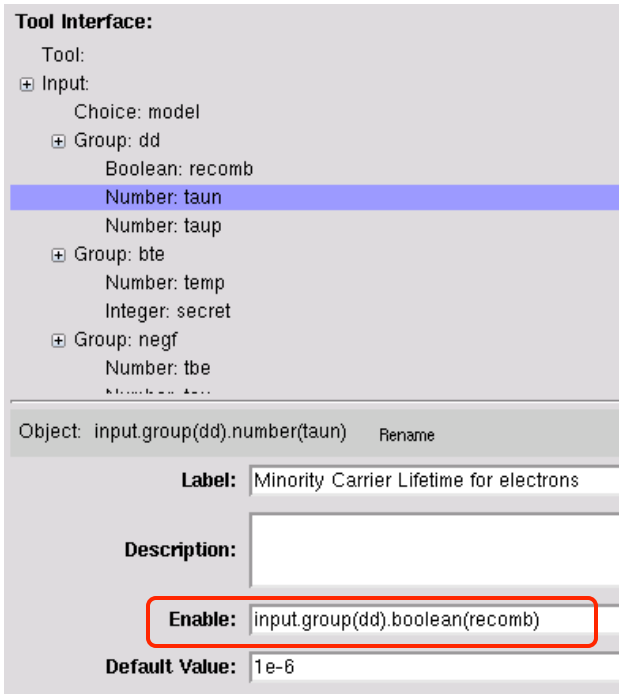
Use Enable condition to enable/disable inputs





boolean enables/disables number entries





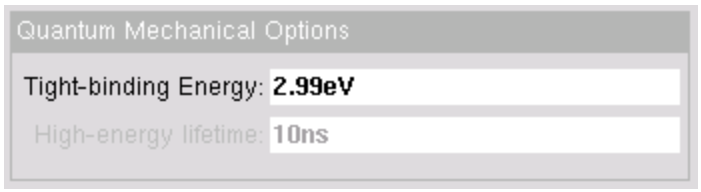
2

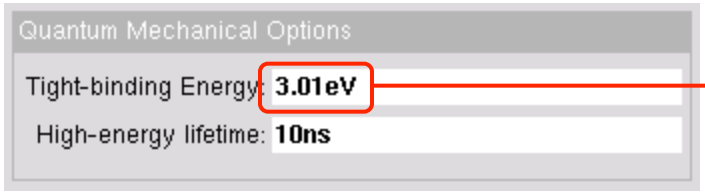
Paste (cntl-Y) into the Enable condition of each number

1 Copy the path for the boolean

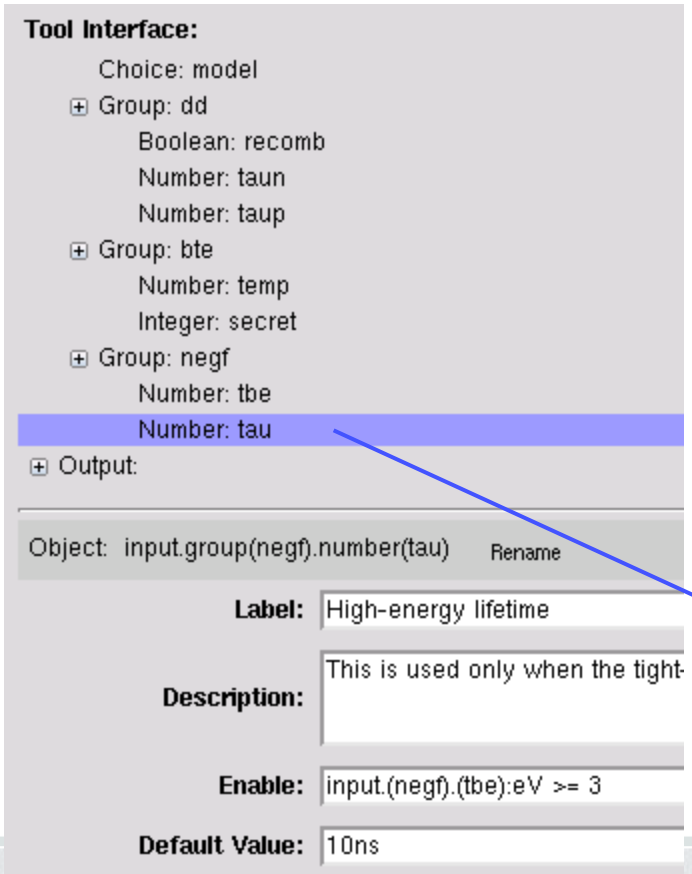
Enable/disable

Enable condition can be an expression





number value enables/disables number below it



Get the value of the tight-binding energy number

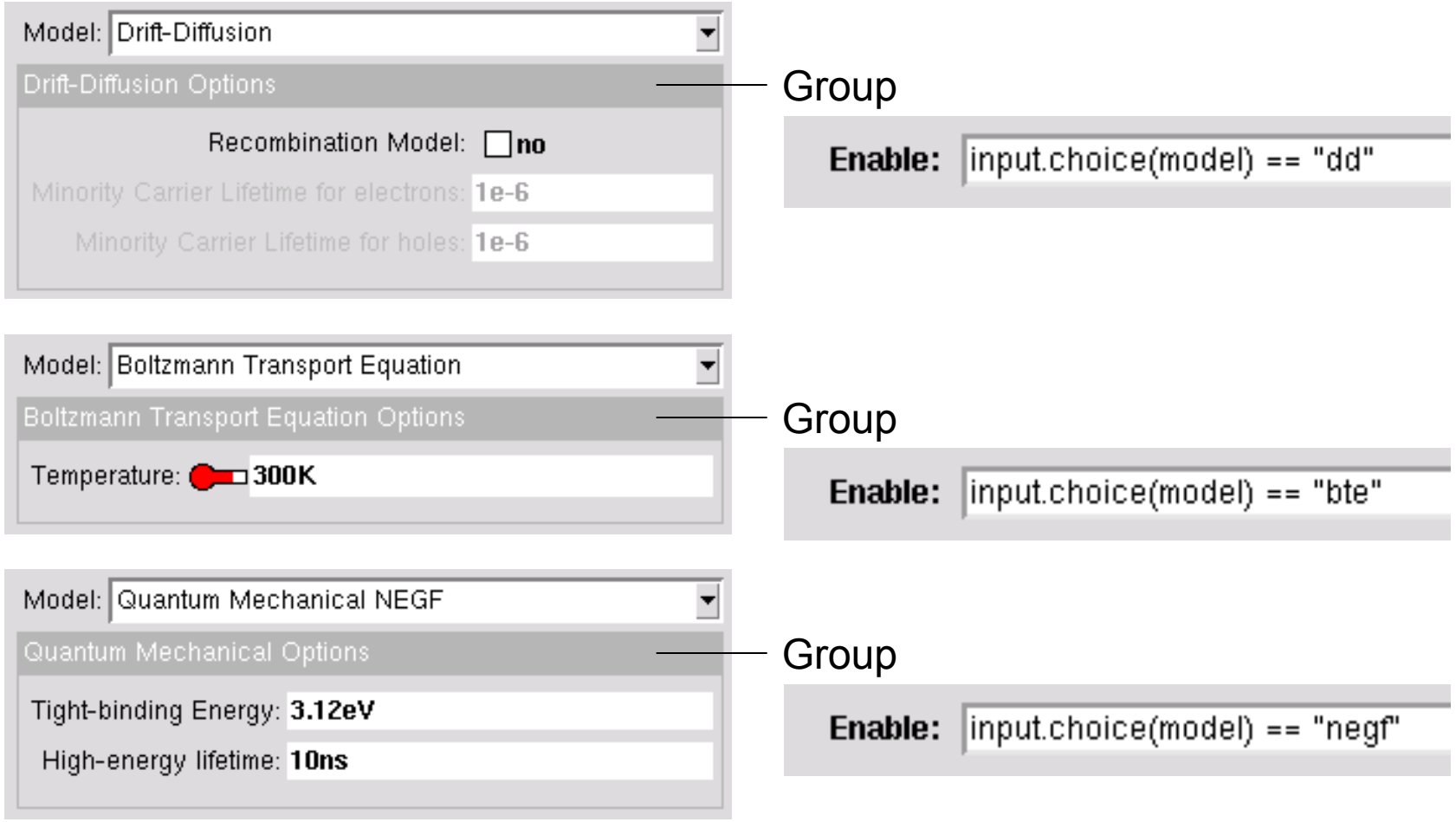
Convert to eV

```
input.(negf).(tbe):eV >= 3
```

Enable High-energy lifetime whenever `tbe >= 3`

Enable/disable groups

Use Enable condition to enable/disable whole groups



Assignment #2: Add options to Spirograph

- Add a note at the very top
- Add a "model parameters" tab and a "comments" tab
- When comments are enabled, produce an output string with comments