## McStas McXtrace



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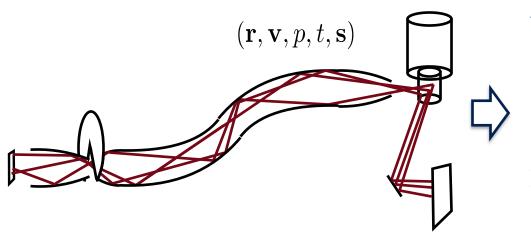


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## **Profiler Output**



```
#pragma acc
for all rays {
    handle_source
    handle_optic_1
    handle_optic_2
    handle_slit
    handle_sample
    handle_detector
```

```
Registers
/* begin component source=Source_simple() [2]
if (!_particle->flag_nocoordschange) { // flag
 if (_source_var._rotation_is_identity) {
                                                         97
   if(!_source_var._position_relative_is_zero)
                                                         82
     coords_get(coords_add(coords_set(x,y,z),
 } else {
                                                         81
      mccoordschange(_source_var._position_rela
if (!ABSORBED && _particle->_index == 2) {
 _particle->flag_nocoordschange=0; /* Reset i
  _particle_save = *_particle;
 DEBUG_COMP(_source_var._name);
 DEBUG_STATE();
 class_Source_simple_trace(&_source_var, _part
 if (_particle->_restore)
   particle_restore(_particle, &_particle_save
  _particle->_index++;
  if (!ABSORBED) { DEBUG_STATE(); }
} /* end component source [2] */
/* begin component coll2=Slit() [3] */
if (!_particle->flag_nocoordschange) { // flag
 if (_coll2_var._rotation_is_identity) {
                                                         80
   if(!_coll2_var._position_relative_is_zero)
     coords_get(coords_add(coords_set(x,y,z),
 } else {
                                                         79
      mccoordschange(_coll2_var._position_relat
```





## Progress and Goals

What have you accomplished since yesterday?
 One large kernel with memory transfer at start and end
 Want to see what this kernel spends compute time on
 Identified need to split into more kernels to get information

Reduce amount of trivial data sent to GPU

What are your goals for today?
 Profiling from split instrument code
 Overview of memory





## **Problems and Solutions**

- What problems are you currently facing?
   Profiling one big kernel
- Have you resolved any problems (or found bugs) that others might find useful?
   Splitting into several kernels



