
Subject: about some class equivalent to BOOST
Posted by [forlano](#) on Tue, 10 Oct 2017 17:24:37 GMT
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Hello,

I am trying to use the Gnu Scientific Library. I have found an example to apply what I need but they use even use the BOOST library.

I wonder if we U++ lovers have something equivalent to perform the same job.

The code that I want to replace is this

```
f_params &params= *reinterpret_cast<f_params *>(p);
```

inside the function f.

Many thanks,
Luigi

PS: Here is the full code

```
#include <cmath>
#include <iostream>
#include <boost/shared_ptr.hpp>
```

```
#include <gsl/gsl_integration.h>
```

```
struct f_params {
    double a;
    double phi;
};
```

```
double f(double x, void *p)
{
    f_params &params= *reinterpret_cast<f_params *>(p);
    return sin(params.a*x+params.phi);
}
```

```
void dointeg(void)
{
    f_params params;
    params.a=1.0;
    params.phi=0.0;
```

```
    gsl_function F;
    F.function = &f;
    F.params = reinterpret_cast<void *>(&params);
```

```
double result, error;  
size_t neval;
```

```
const double xlow=0;  
const double xhigh=10;  
const double epsabs=1e-4;  
const double epsrel=1e-4;
```

```
int code=gsl_integration_qng (&F, xlow, xhigh, epsabs, epsrel, &result, &error, &neval);  
}
```

```
int main(void)  
{  
    dointeg();  
}
```