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Fun with namespaces

A sort of not really continuation of Stefan's talk of '13

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I do not remember '13

- Internal linkage is great
 - use static
- For more information see:
2013-09-04
The C++ Keyword static



What are namespaces?

- “Boiled down to its essence, a namespace is just a fancy way of letting you use the prefixes you know and love without making people look at them all the time.” - Scott Meyers
- Do not pollute the global namespace – avoid name collisions by providing everything in your own namespace(s)
e.g. `mitk::Image`

The bad

- Do NOT use “using <myfavoritenamespace>” in your header globally – ever
 - That way lies madness – you are polluting again

```
LivingExpenses.h
namespace greatFrenchStuff
{
    const double cout = 4.5;
}
```

```
CalculateYourLife.h
using namespace greatFrenchStuff;
....
```

The static replacement – and even better

- Use unnamed namespaces to provide internal linkage to variables, functions *and classes*

YourSource.cpp

```
namespace
```

```
{
```

```
    const double NUMBER = 2.3;
```

```
    class HelperClass { ... };
```

```
}
```

The promised fun – please use judiciously

And now for something completely different:

```
namespace One
{
    void doSomething();
    void doSomethingStupid();
}
namespace Two
{
    void doSomethingElse();
}
namespace Better
{
    using namespace One::doSomething();
    using namespace Two;
}

void IAmBored()
{
    Better::doSomething();
    Better::doSomethingElse();
    Better::doSomethingStupid(); //error
}
```


A photograph of the DKFZ building facade, a modern multi-story structure with a central glass tower and balconies. The sky is blue with some clouds. In the foreground, there is a paved plaza with several water fountains and orange benches.

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Thank you
for your attention!

Further information on www.dkfz.de

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