Hello I'm doctor Joanna Faure Walker

an I am the module tutor for IR

DR0008 catastrophe risk modelling.

I am joined by Doctor Carmine

Galasso from UCL Engineering who is

also a module tutor on this module.

Carmine and I both have research

interest in catastrophe modelling.

We both teach on the module and we

also both have industry experiences.

Before joining UCL we have both worked

for catastrophe modelling firms.

We actually worked for rival firms,

but it's OK. We're colleagues now.

As you can guess, this module is

all about catastrophe modelling.

Hopefully that's obvious from the title.

We go into a lot more detail than

we're able to do in IR DR0015 which

many of you will have completed

when you come to do this module.

So in my IRDR 0008 we give the

introduction to catastrophe modelling.

The overview of the different modules

and we also go quite a lot into

the terminology and the jargon.

That's to make sure you can

understand both the module itself,

but also any wider reading you

want to do around the subject.

We review probability and statistics

and then do a bit on Monte

Carlo simulation in particular,

and we use this to help us do some

exercises on, for example PSHA.

Probabilistic seismic hazard analysis.

For example, we use simulation based PSHA,

and physics based ground motion.

Equations come into some of

our exercises as well,

so you do actually do some

quantitive exercises in this module.

We learn about different

data types and exposure.

We spend some time on vulnerability

on natural hazards in general,

but with a focus on seismic vulnerability

and flood front ability as well.

We also look at expanded

applications of catastrophe modelling.

Real time modelling,

parametric modelling,

how we communicate over losses

and event response.

And also have a think about alternative

uses of catastrophe modelling and how this

has changed throughout time in the past,

and what other applications

we may have in the future.

For the module we have a module of reference.

If you like this book,

natural catastrophe risk management

for modelling a practitioners

guide will be very useful.

You can jump in and out of it.

You don't have to necessarily

read it page to page,

but you will find some

chapters interesting to you,

and you're also probably recognize

quite a few of the names of the

contributing authors by the

time you finish the module.

So I hope this module sounds

interesting to you.

It should be of interest of

anyone who wants to go into

catastrophe modelling directly.

Anyone who wants to go into one of

the applied fields or industries,

or anyone with a bit of imagination

who wants to learn more about

different techniques to calculate,

quantify risk.

And have a think about how could that be

used in whatever it is you want to do.