

# Training Course USING FLR FOR QUANTITATIVE FISHERIES ADVICE



FISHREG  
Maritime Affairs Unit - IPSC  
European Commission  
Joint Research Center

## Welcome to (almost) the EC JRC, Ispra, Italy.



## AGENDA

- TIMETABLE: 9.00 - 12.30 / 14.00 - 17.30
- BREAKS @ 10.30 / 15.30

# LOGISTICS

## Lunch

- Don Guanella

## Dinner

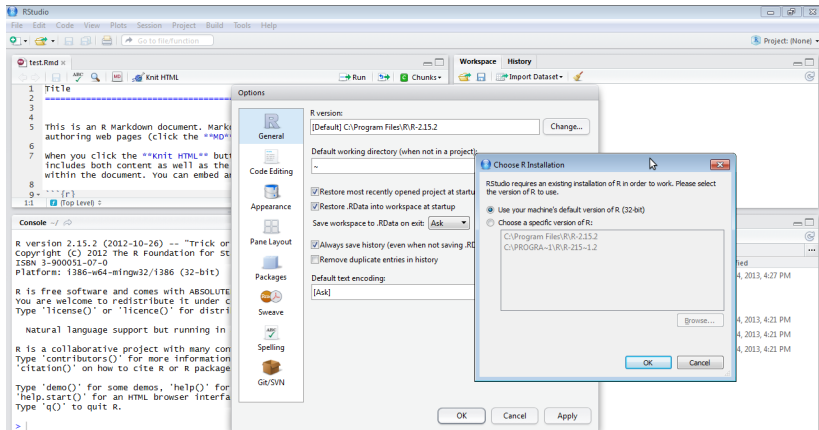
- Don Guanella
- Other places
- Course dinner THU

# MATERIALS

- R 2.15.\*
- RStudio

# INSTALLATION

## Select 32 bit R



## INSTALLATION: packages

```
install.packages("")
```

- knitr
- RcppArmadillo

## INSTALLATION: packages

```
install.packages(repos="http://flr-project.org/Rdevel")
```

- FLCore
- FLEDA
- ggplotFL
- FLAdvice
- FLa4a
- Flash
- SQLiteFL



## OUTLINE

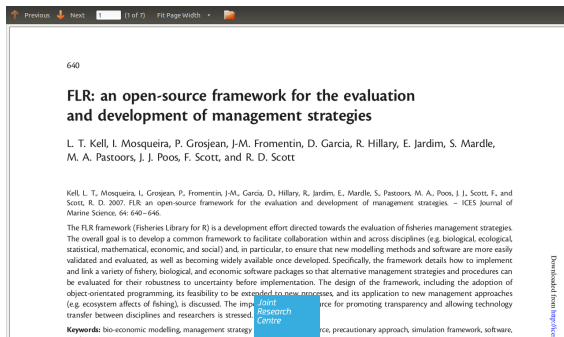
1. Introduction to FLR
2. Load data and EDA
3. Introduction to modelling: FLSR
4. Stock assessment
5. Reference points
6. Forecasting
7. Simulation
8. A Case study

## HOW WILL IT RUN

- Presentations
- Tutorials
- Exercises
- Paper of the day

## Today's paper

Kell, L. T., Mosqueira, I., Grosjean, P., Fromentin, J-M., Garcia, D., Hillary, R., Jardim, E., Mardle, S., Pastoors, M. A., Poos, J. J., Scott, F., and Scott, R. D. 2007. FLR: an open-source framework for the evaluation and development of management strategies. – *ICES Journal of Marine Science*, 64: 640–646.



## LICENSE

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## ABOUT US

Ernesto Jardim - STECF, MPs, a4a

Colin Millar - a4a, MPs

Iago Mosqueira - FLR, IOTC, MPs

Chato Osio - MED, STECF

Finlay Scott - BioEco, FLR

# READY

'Men learn while they teach.'

Seneca the Younger