

# Training Course USING FLR FOR QUANTITATIVE FISHERIES ADVICE



Maritime Affairs Unit - FISHREG European Commission Joint Research Center (IPSC)



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





## **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



# **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



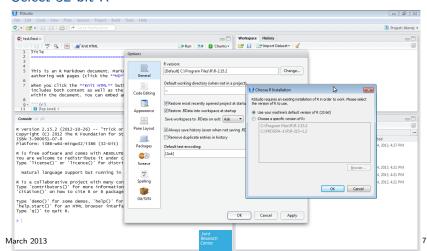
# **MATERIALS**

- 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
- FI.F.D.A
- ggplotFL
- FLAdvice
- FLa4a
- FLash
- SQLiteFL



# **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

lago Mosqueira - FLR, IOTC, MPs

Chato Osio - MED, STECF

Finlay Scott - BioEco, FLR



# **READY**

'Men learn while they teach.'

Seneca the Younger