



## GATE training on medical imaging (PET, SPECT, CT) dosimetry and radiation therapy – Beginner level 15<sup>th</sup> to 17<sup>th</sup> of December 2021

### Agenda (Time provided for Vietnam, ICT)

WED 15	THU 16	FRI 17
Welcome, Han Gyu Kang, 13:00 Session 1 - Introduction, Han Gyu Kang, 13:30 Session 2 - Basics: Geometry, Giovanna Fois 14:00 - 15:15 Coffee break, 15:15 Session 3 - Basics: Physics, Min Sun Lee 15:45 - 17:00 Lunch break 17:00 - 18:00 Session 4 - Basics: Sources, Seungeun Lee 18:00 - 19:30 Coffee break, 19:30 Session 5 - Basics: Actors, Giovanna Fois 20:00 - 21:30 Evaluation, Giovanna Fois 21:30 - 22:30	Session 6 - Basics: CT scan, Seungeun Lee 13:00 - 14:00 Session 7 - GATE for Medical Imaging, Han Gyu Kang, 14:00 Coffee break, 14:30 Session 8 - SPECT imaging, Han Gyu Kang 15:00 - 17:00 Lunch break 17:00 - 18:00 Session 9 - External RT, Lydia Maigne 18:00 - 19:30 Coffee break, 19:30 Evaluation, Lydia Maigne 20:00 - 21:00	Session 10 - PET imaging, Min Sun Lee 13:00 - 14:30 Coffee break, 14:30 Session 11 - Internal RT, Giovanna Fois 15:00 - 16:30 Lunch break 16:30 - 17:30 Session 12 - Hadrontherapy, Lydia Maigne 17:30 - 19:00 Coffee break, 19:00 Evaluation, Min Sun Lee 19:30 - 21:00

### Remote courses with Microsoft Teams

The GATE training is organized remotely. We will use Microsoft Teams.

Joining a Teams meeting on the web can be done with the Microsoft Edge or **Google Chrome** web browsers and does not require a software download. Joining on the web is useful if you do not have the Microsoft Teams application installed on the computer you are using.

If you **do have** Microsoft Teams installed on your computer, the easiest way to join a Teams meeting is from within the application. If you really want to install Microsoft Teams application on your computer, it is available for Linux, MAC OS X and Windows OS. To install Microsoft Teams, visit the following web page with the computer you will use for the training and choose the application dedicated to your OS: <https://www.microsoft.com/en-us/microsoft-365/microsoft-teams/download-app#allDevicesSection> and create your account.

All the presentations will be accessible in pdf format using this [link](#), materials will be updated one day before the training.

The courses will be registered as videos and provided after the training.



## Practice exercises with GATE

We installed GATE and necessary software on a dedicated server you will be able to access remotely. *Your login and password are provided in a dedicated email.*

In your home directory you will find 3 repositories `day1/`, `day2/` and `day3/` with the corresponding sub-sections and exercises (available one day before the training)

### Connection using x2go:

You will connect remotely to a server to perform all your exercises with GATE. For this, you will use the x2go application that you will need to install on your computer (Linux, MAC OS or Windows) using the link hereafter:

<https://wiki.x2go.org/doku.php/download:start>

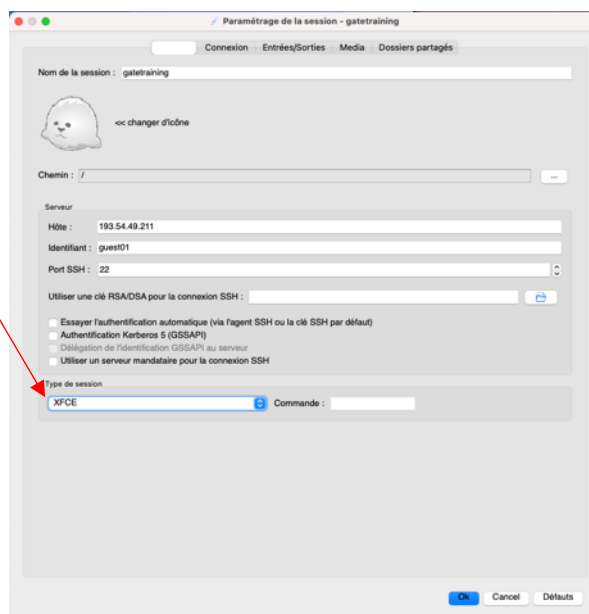
For Linux distributions, you can simply install x2go with the following command while being super-user:

```
yum install x2goclient.x86_64 for CentOS or
```

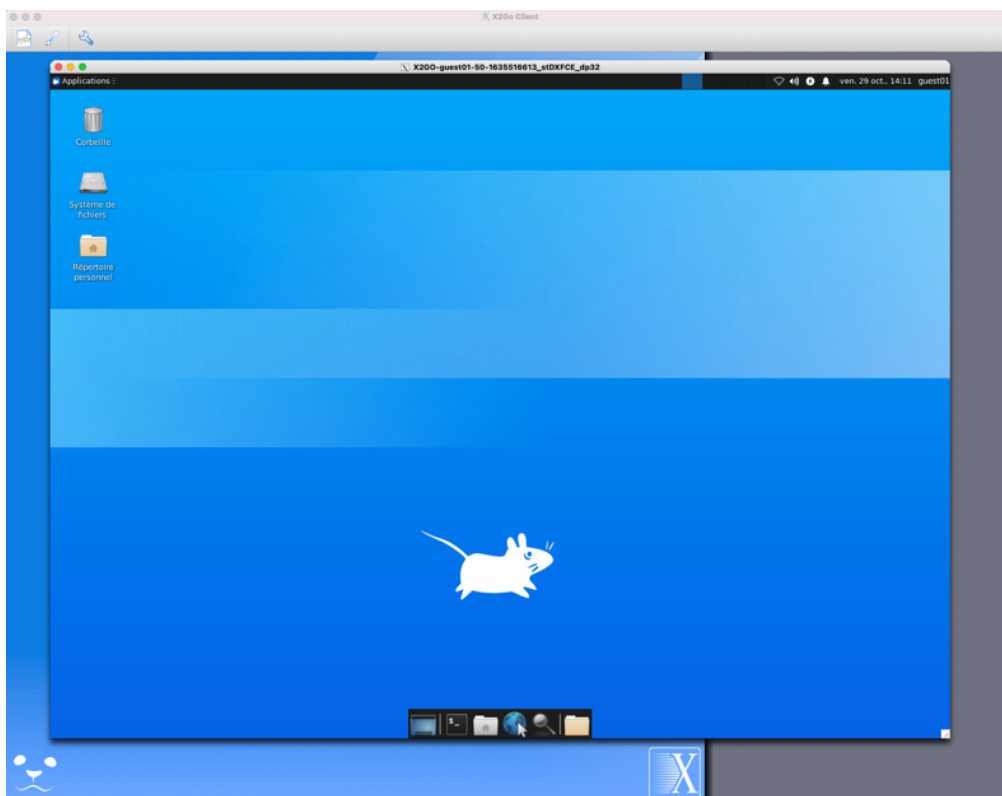
```
apt-get install x2goclient.x86_64 for Ubuntu
```

Once installed, configure your session as follows using your login, password received by email. The IP address of the server is: **193 . 54 . 49 . 211**

1°) Launch x2go and create a new session with the information received by email, **please select XFCE for the Session type.**

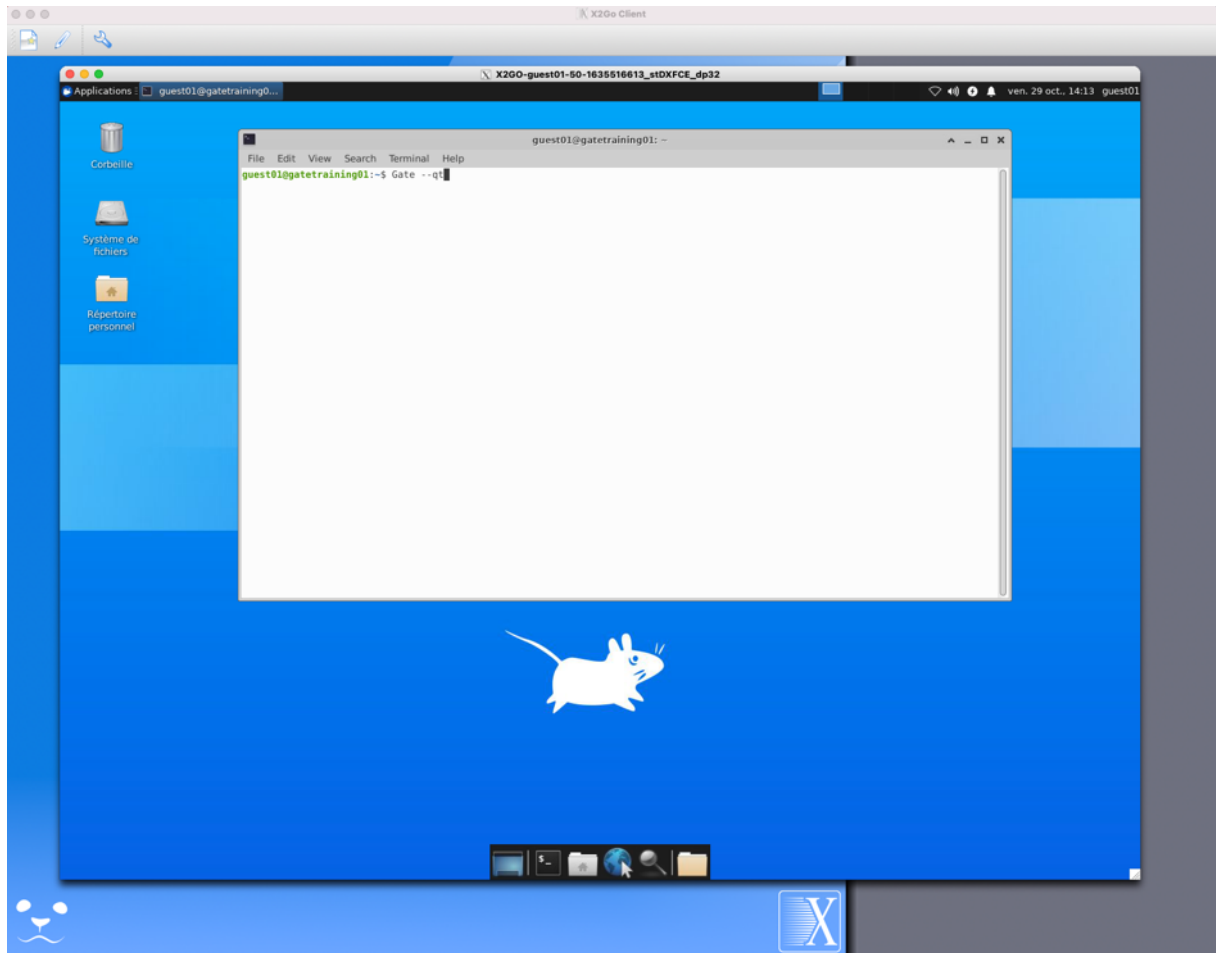


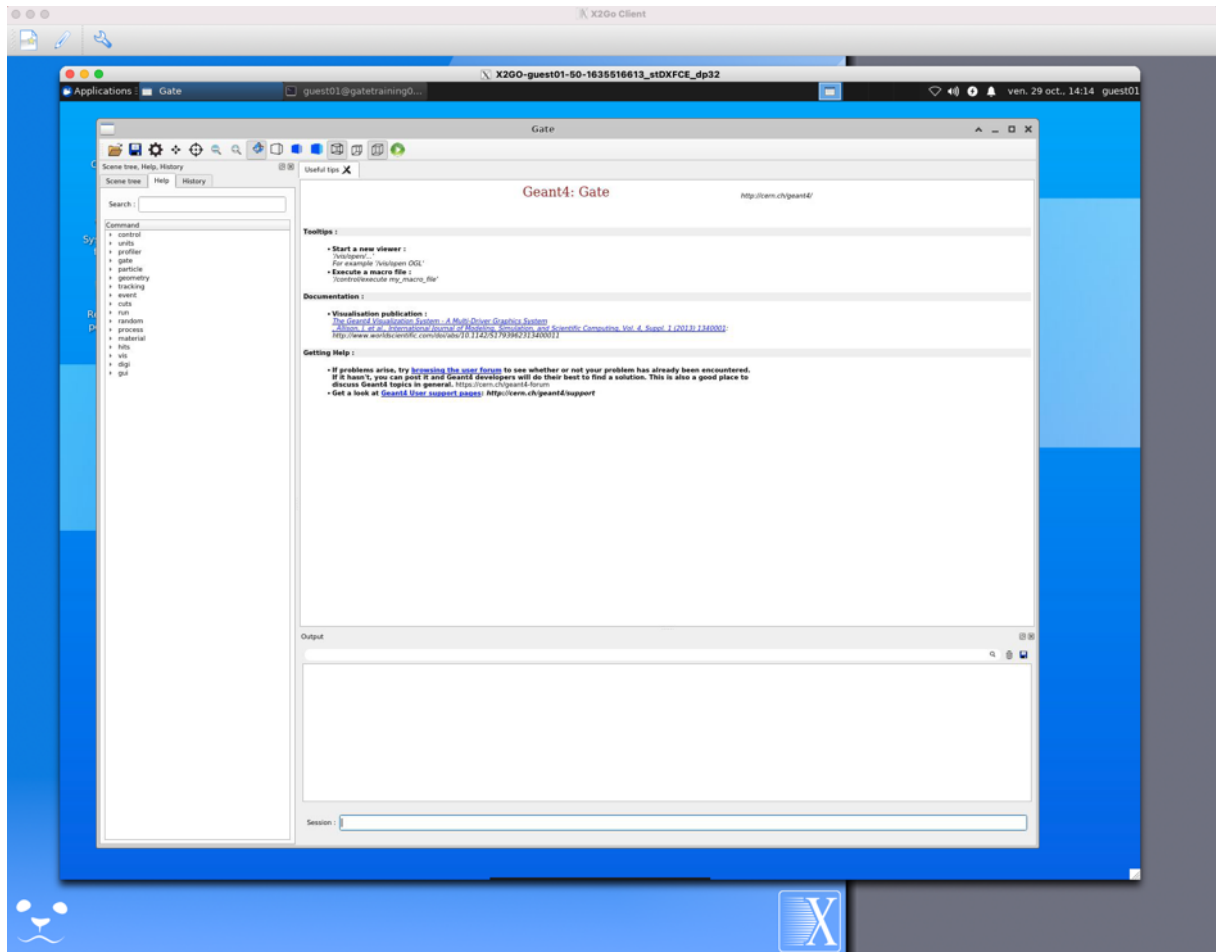
2°) Enter your password; once logged in, a Linux interface will open:



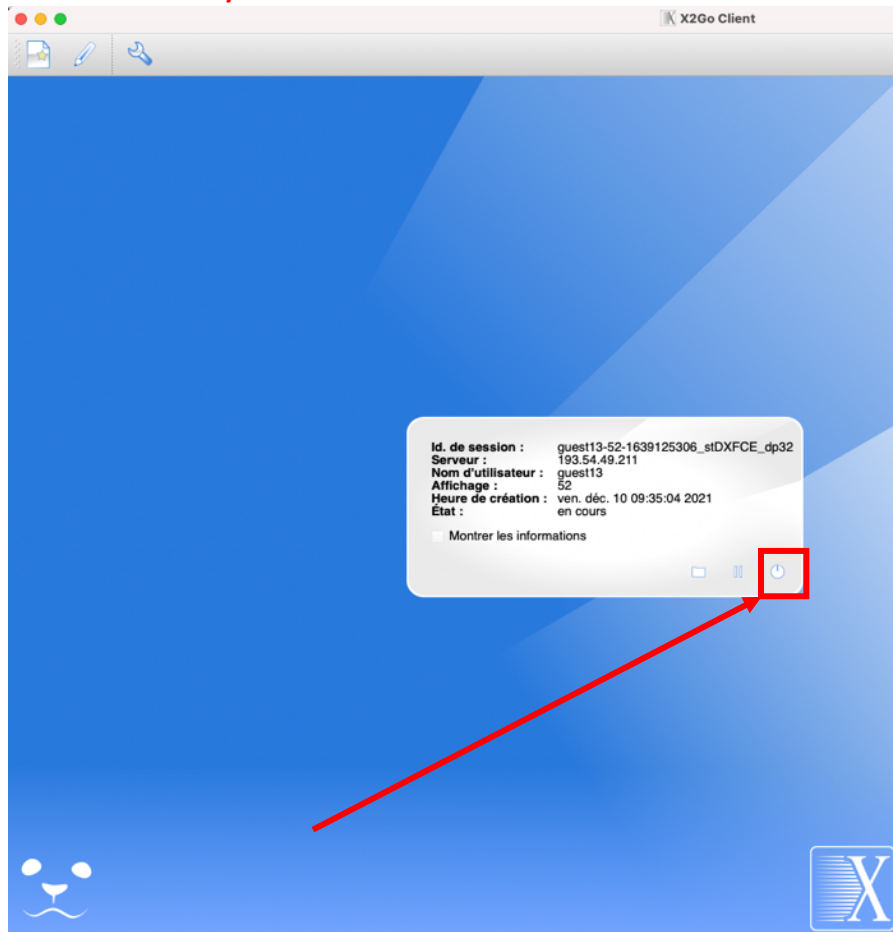


3°) Open a terminal and launch Gate with the Qt visualization:





**4°) Warning: Do not forget to disconnect properly from x2go when your work is finished, to do so please click on the ON/OFF button as below:**



**Contact, in case of any problem:**

Lydia Maigne

email: [Lydia.Maigne@clermont.in2p3.fr](mailto:Lydia.Maigne@clermont.in2p3.fr)