How to set up ROS WLAN Remote access:

1. Assign to local WLAN/LAN: Connect the Robot-Laptop with the Router, sign in to the Router WLAN:

-> SSID: ASUS_F8 -> PIN/WLAN-PW: 45891755

(Credentials to administrate the router can be found on the router housing backside. The new access passwort was changed from "admin" to "Admin" however.)

- 2. Start Terminal (CTRL + ALT + T)
- 3. Open .bashrc:

"\$ gedit .bashrc"

- 4. Start a second Terminal (CTRL + ALT + T)
- 5. Check your computer's IP Adress:

"\$ ifconfig"

- -> eno1 you LAN Cable based connection IP
- -> wlo1 is your WIFI connection IP
- 6. To check that both PCs are within the same Network & beeing connected:

"ping nnn.nnn.nnn" [n = IP of the computer to connect to]

7. Adapt the .bashrc: add the following lines to the end:

"export ROS_MASTER_URI=http://192.168.50.242:11311" [That's the Robot's Laptop IP, where the roscore is launched] "export ROS_HOSTNAME=192.168.yyy.yyy [y: Replace with your computer's wlo1 IP for Wireless Connection]

- 8. Launch the roscore and nodes on the Robot PC
- 9. Try to publish/echo on topics via the remote PC by typing as like as you would do with the Robot's Laptop to verify it works.

done.

Link to the official webpage: http://wiki.ros.org/ROS/NetworkSetup