4.3 Head & Neck case

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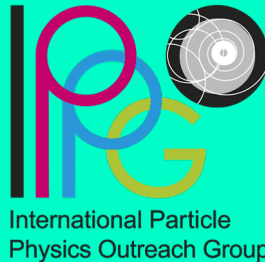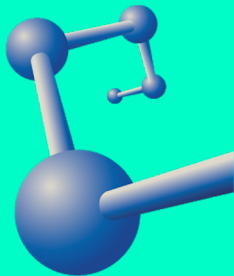Student of Mechatronics Engineering FI-UNAM (Mexico)
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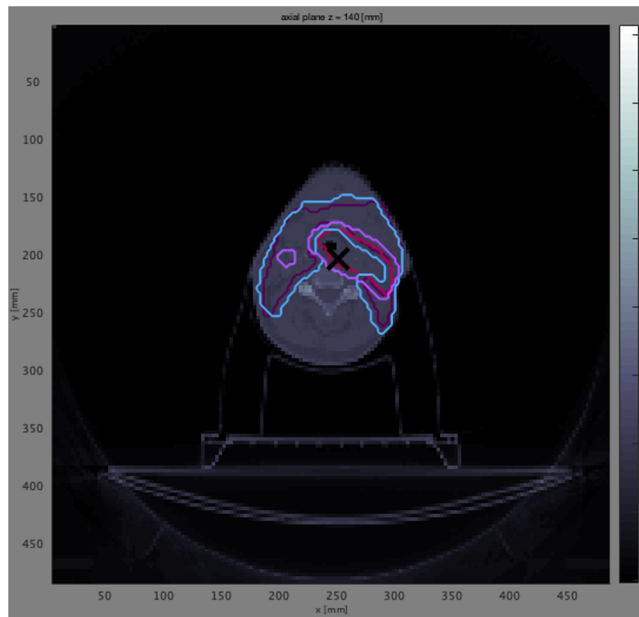
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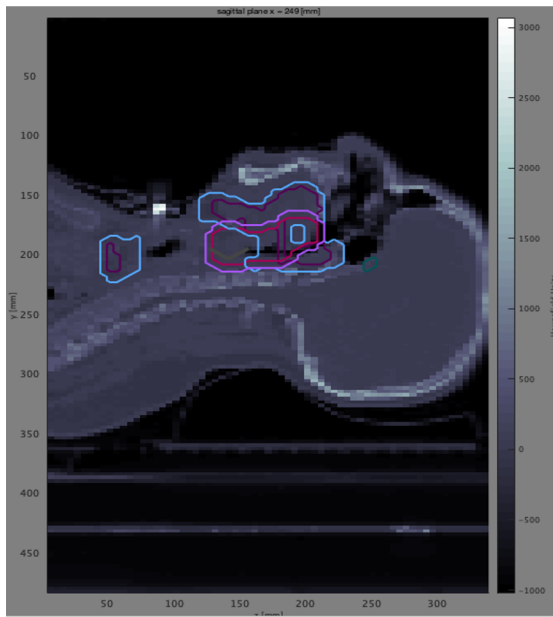
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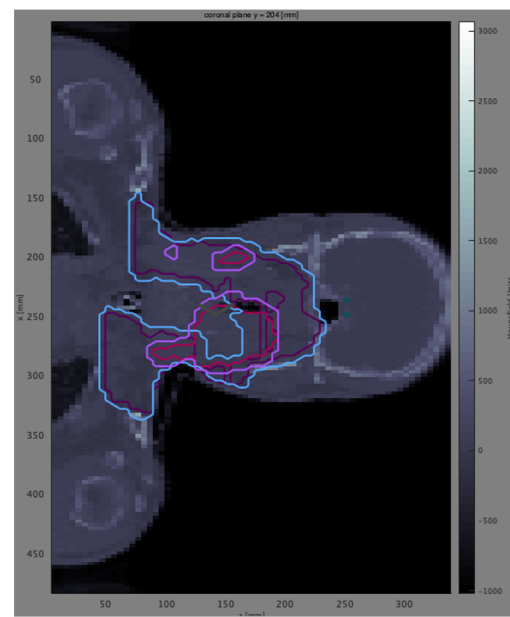
1. Meet the case

Knowing the algorithm and the steps of action, try to optimize the treatment planning.

Axial view

Sagittal view

Coronal view

1.1 Head & Neck optimization

1) Add three proton beam angles on your own. (e.g degrees: 90, 180, 270)

1) Simulate a patient positioning error:

> Remove the hook at the auto isocenter checkbox and define a new isocenter thereby introducing an offset. (e.g isocenter values: 260 220 150)

> Recalculate with the recalculation button. **<u>Do not perform a new optimization.</u>**

3) Analyze and compare the resulting dose distribution. What changed ?

2. Make your proposal

Now you know enough to analyze this case. What would you suggest in this case? Detail it, take screenshots, save them and explain why it would be a good plan.

3. Let's play a little

Choose an easy plan for you and try:

1. What happens if you set to False the automatic isocenter and type any number? You can use the button Recalc so you do not need to repeat the whole algorithm.
2. From the box of Objectives and Constrains, what happens if you interchange OAR (Organs At Risk) and TARGET settings?
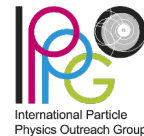
Let's conclude

Go to the subfile
"4.4_Conclusions"