Level Design
P0rtal2

Alexis Ferrand, 3GDB.

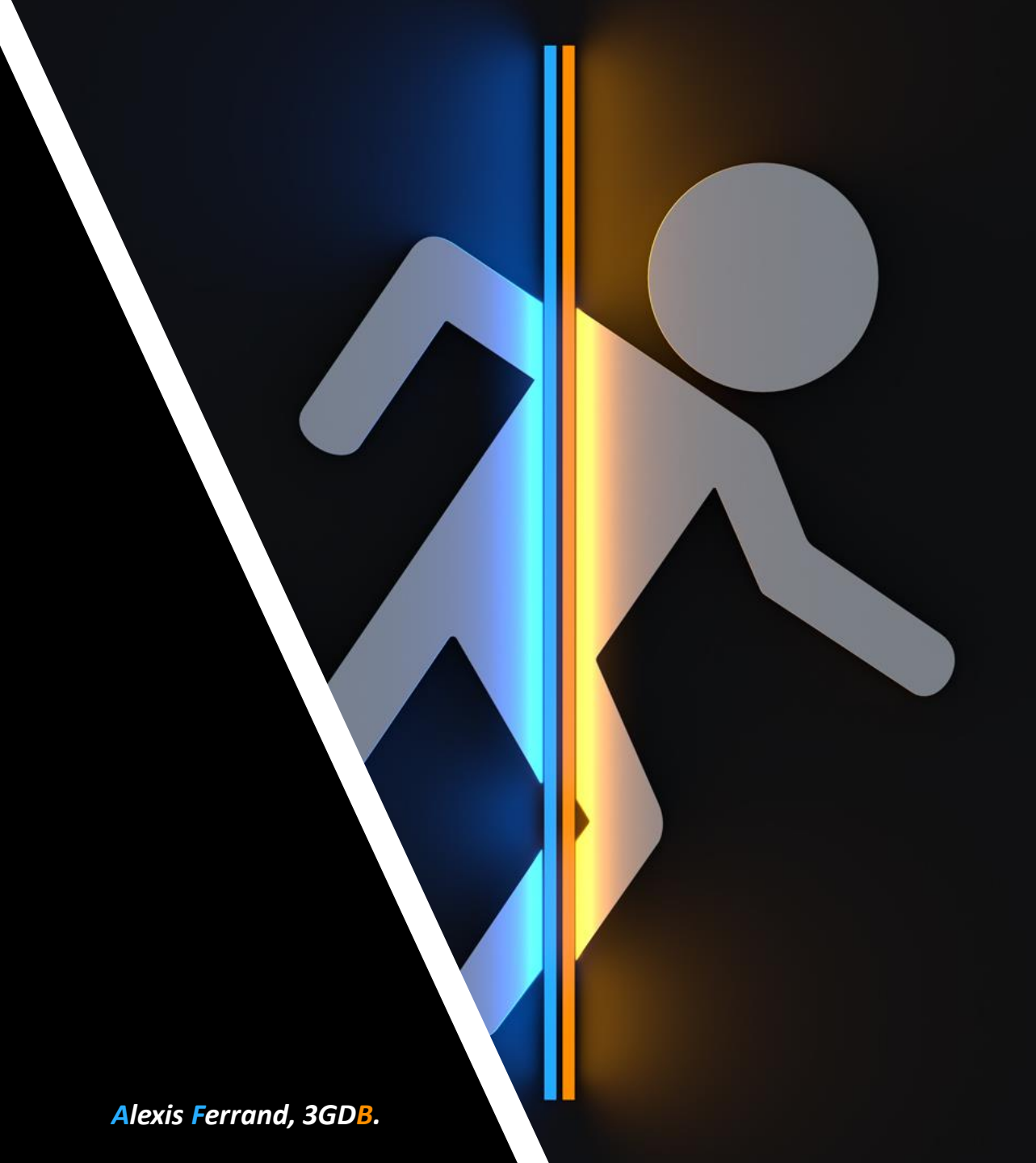
Intentions

For my portal map, I chose to use a single level and 3 rooms within it, with an increasing difficulty between each. My main ingredient is the Excursion Funnel. I propose a use of it focused on player movements and cube/sphere movements within the game space.
I consider that the player masters the basic controls, the jump, the portals and their behaviors, including with objets and flux.

My first room is made to push the player to learn and use the excursion funnels and their navigation potential. The player is also warned about the Goo, which is the only danger and penalty in the whole level, but I prevent his fall with glass panels. I also tease the use of cubes, sphères, weighted storage receptacle, cube/sphere pipelines and foldable platforms.

In the second room, I let my player practice the excursion funnel movements through the room. The use of it is mandatory to reach the exit of the room, and the use of cubes, spheres and weighted storage receptacle for both too. All the ingredients, main or secondary, are now used and the goo is now a real danger.

In the third room, I test the player abilities and mastery of the previous mechanics to complete the level. I focused the room on player reflexion to win. No other ingredient are added.



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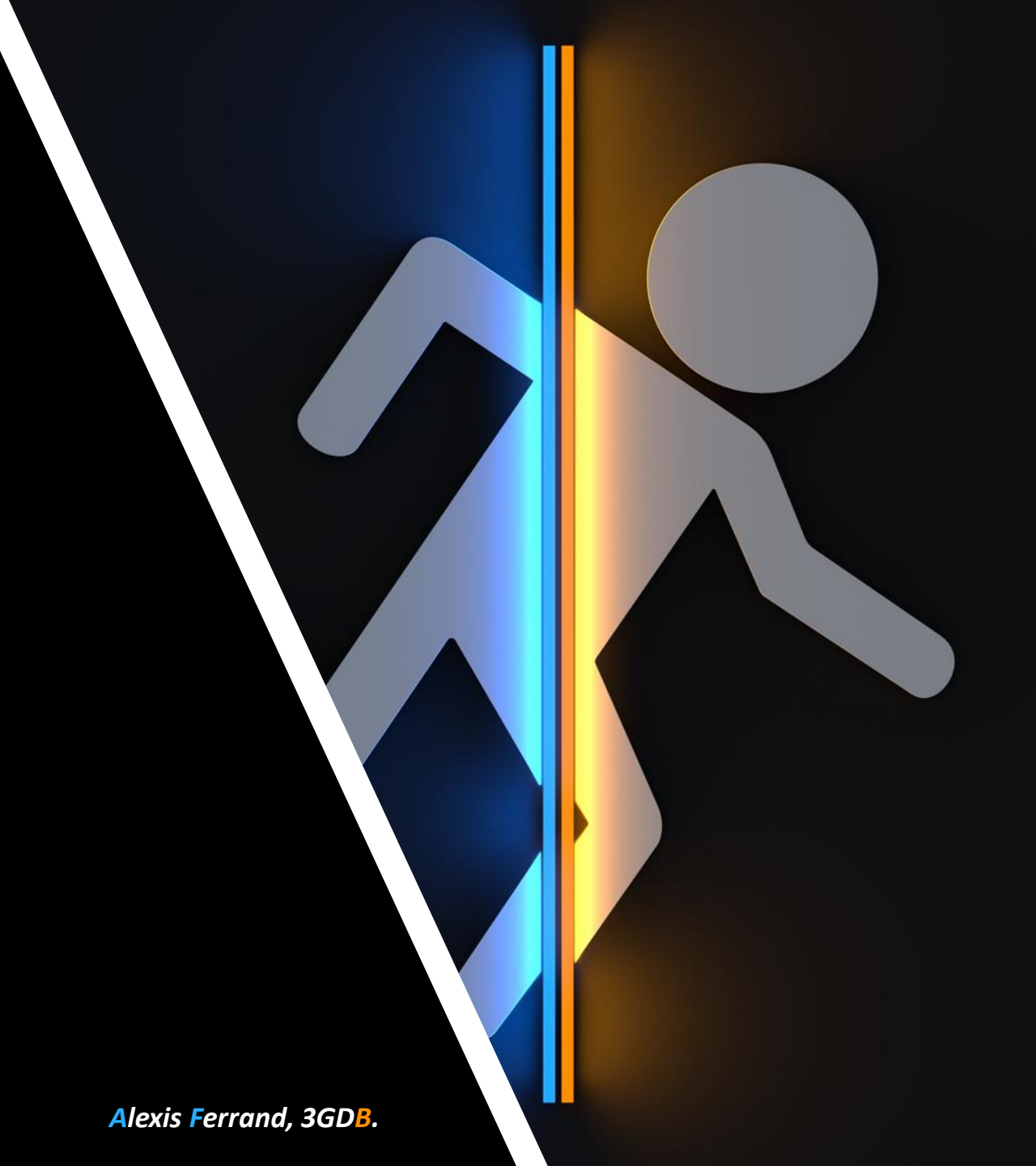
Level Layout

Here is a preview of the whole level. The first room (1) is splitted in two parts, the second (2) and the third room (3) are both a full open space.



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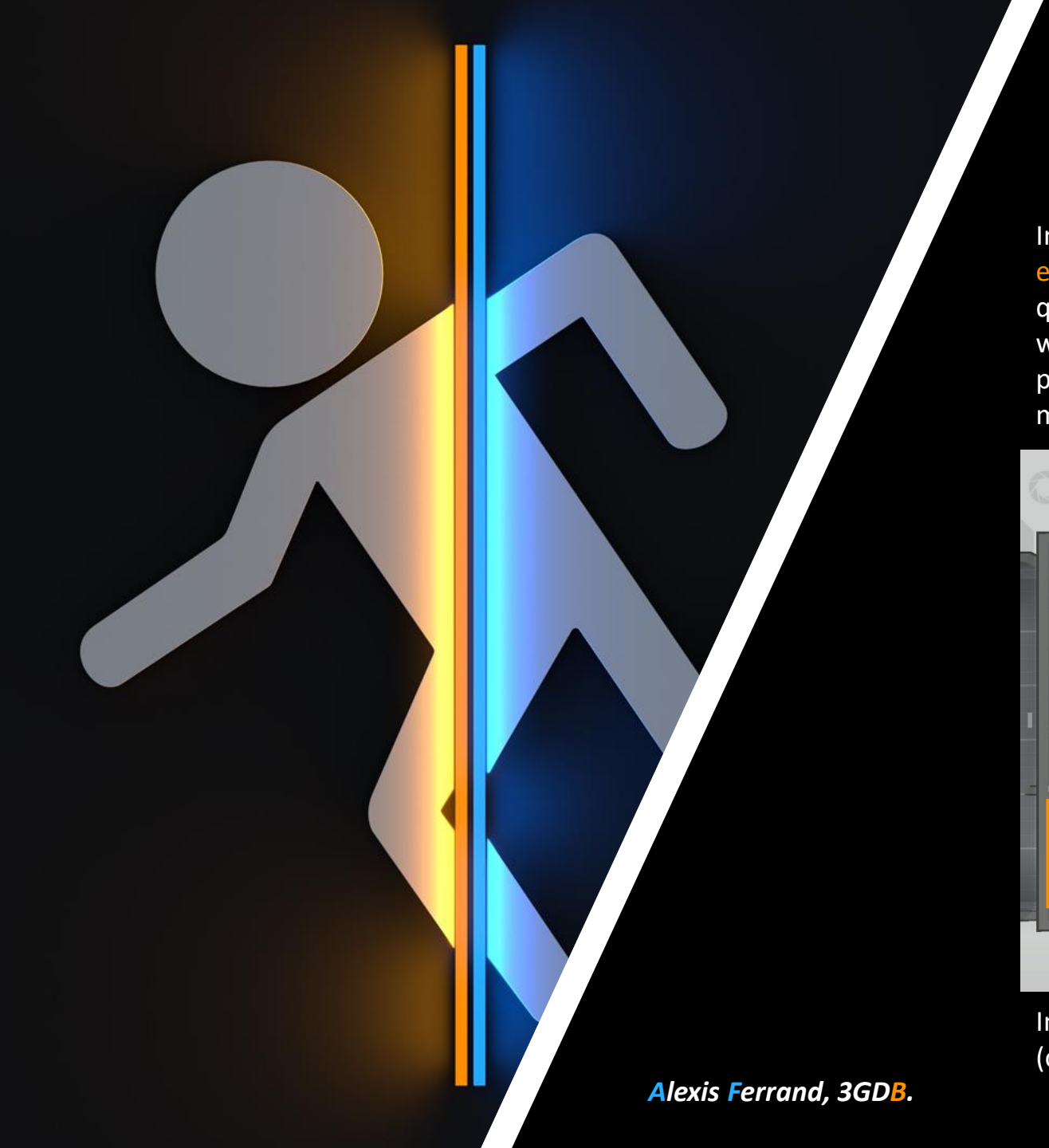
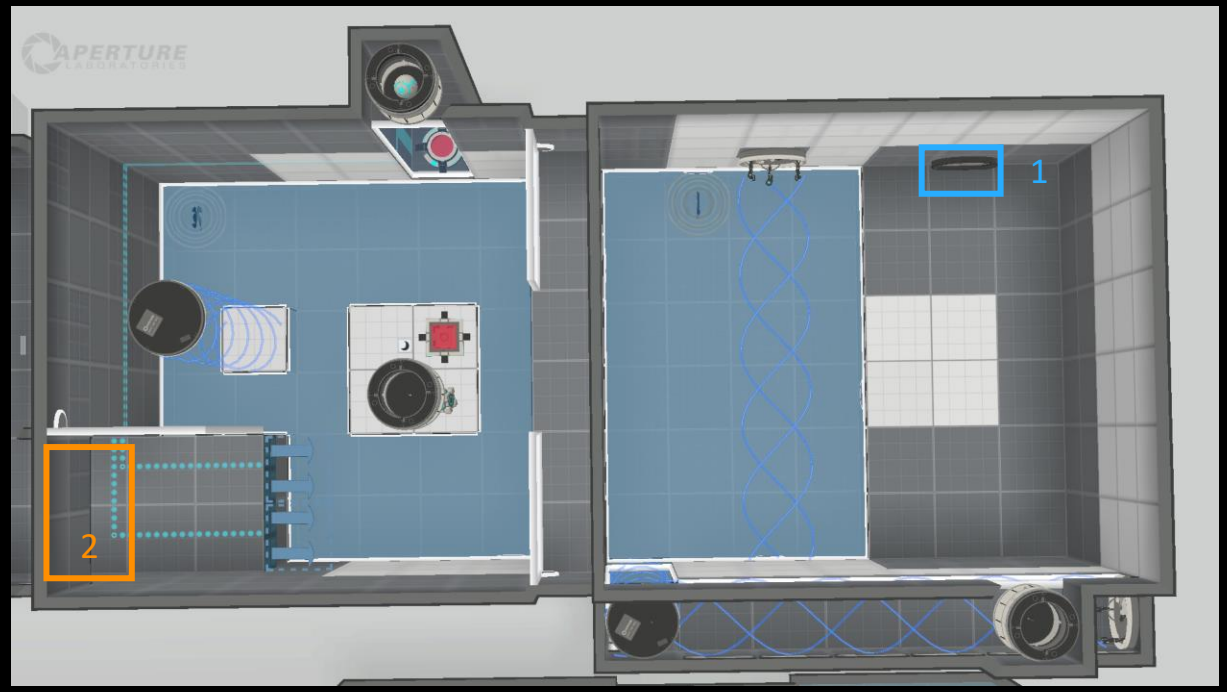


First Room Layout

In the first room, the player start (1) is on the right side of this picture, the exit (2) is on the opposite side. The entrance of the level brings the player in quite safe area, and the first part of the room 1 is an open space with some walls and floor tiles « portal friendly ». An excursion funnel is crossing the part 1 of the room and can be used through a portal. This funnel is mandatory to cross above a large wall splitting the room 1 in two.



In the second part, the player will have to complete basic cube puzzles (optional) and use an excursion funnel (mandatory) to reach the end.

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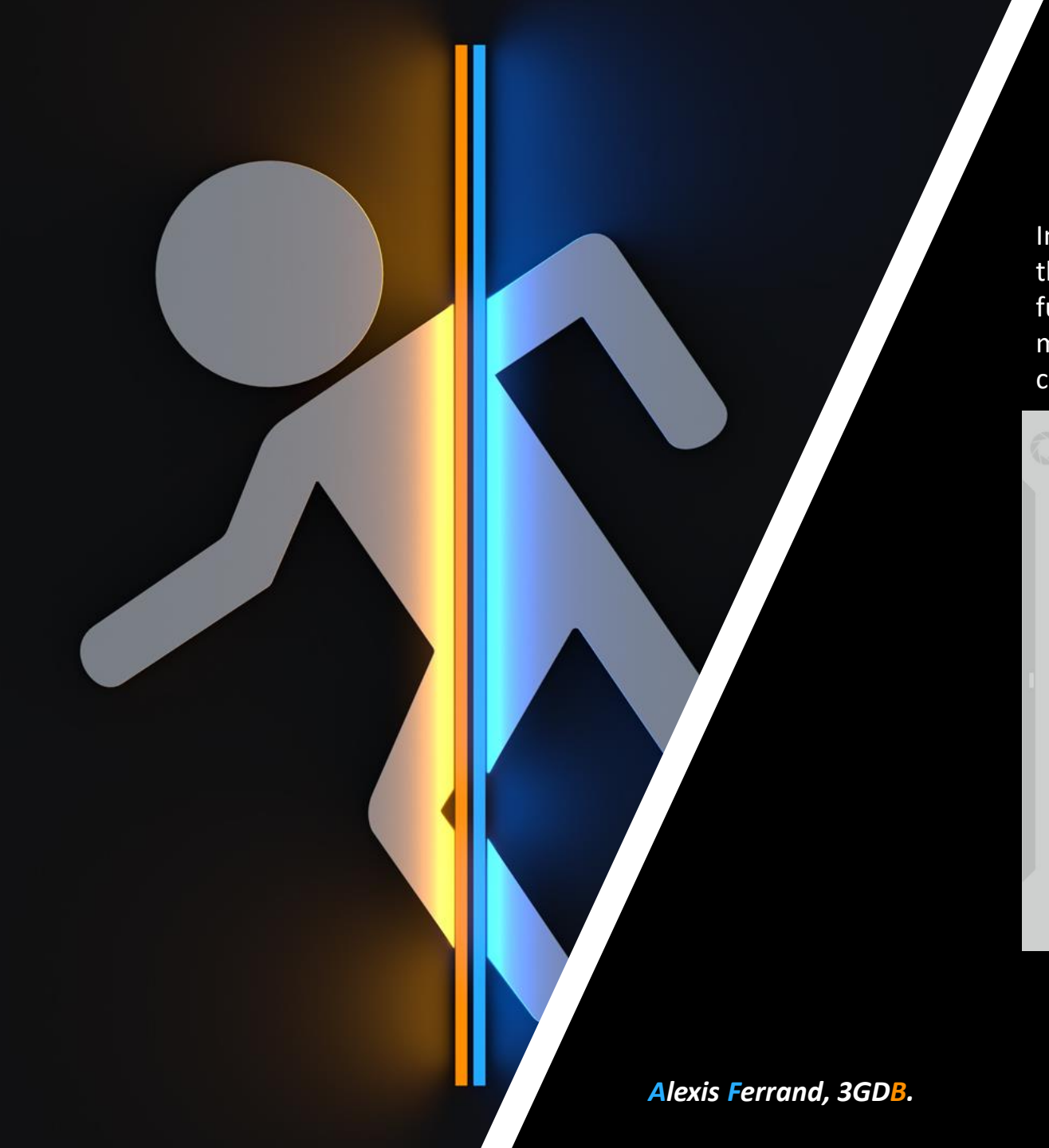
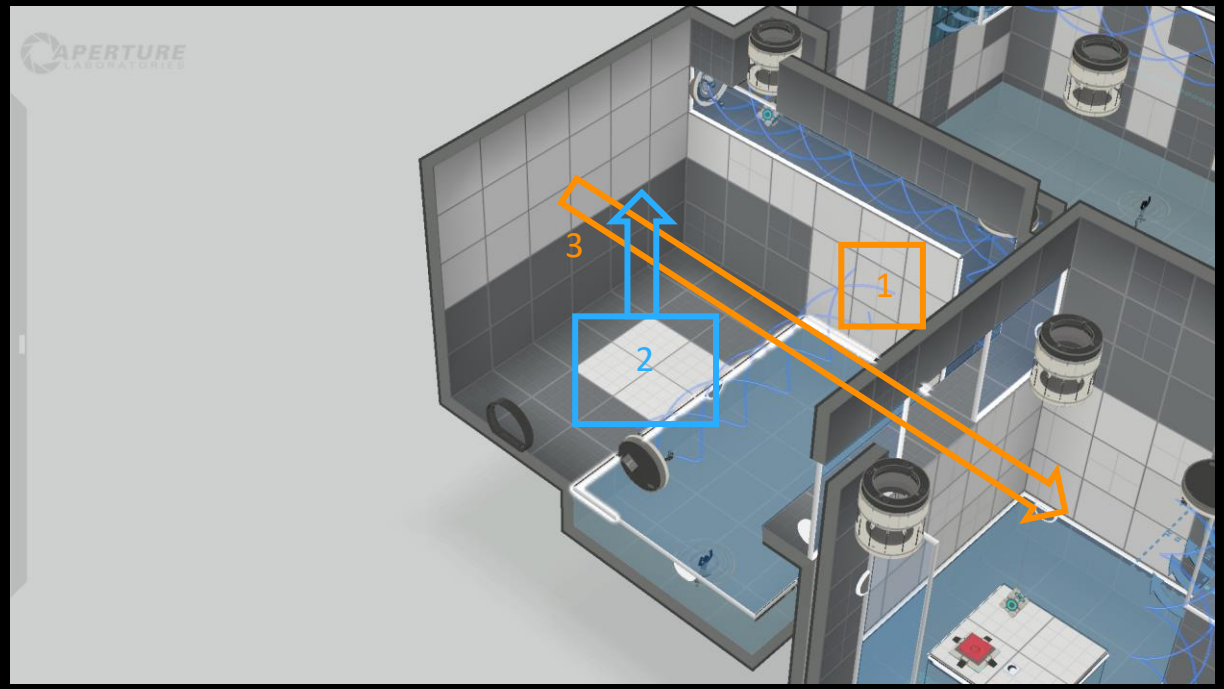


First Room Challenges
Part 1

In the first part, the player gathers the excursion funnel on the right wall (1), then uses it on the floor (2) to take enough height, and then uses the same funnel on the back wall (3) to push himself on the opposite side, above the middle wall to reach the second part of the room. I also tease the cube/excrusion funnel behaviors and the goo behind glass panels.



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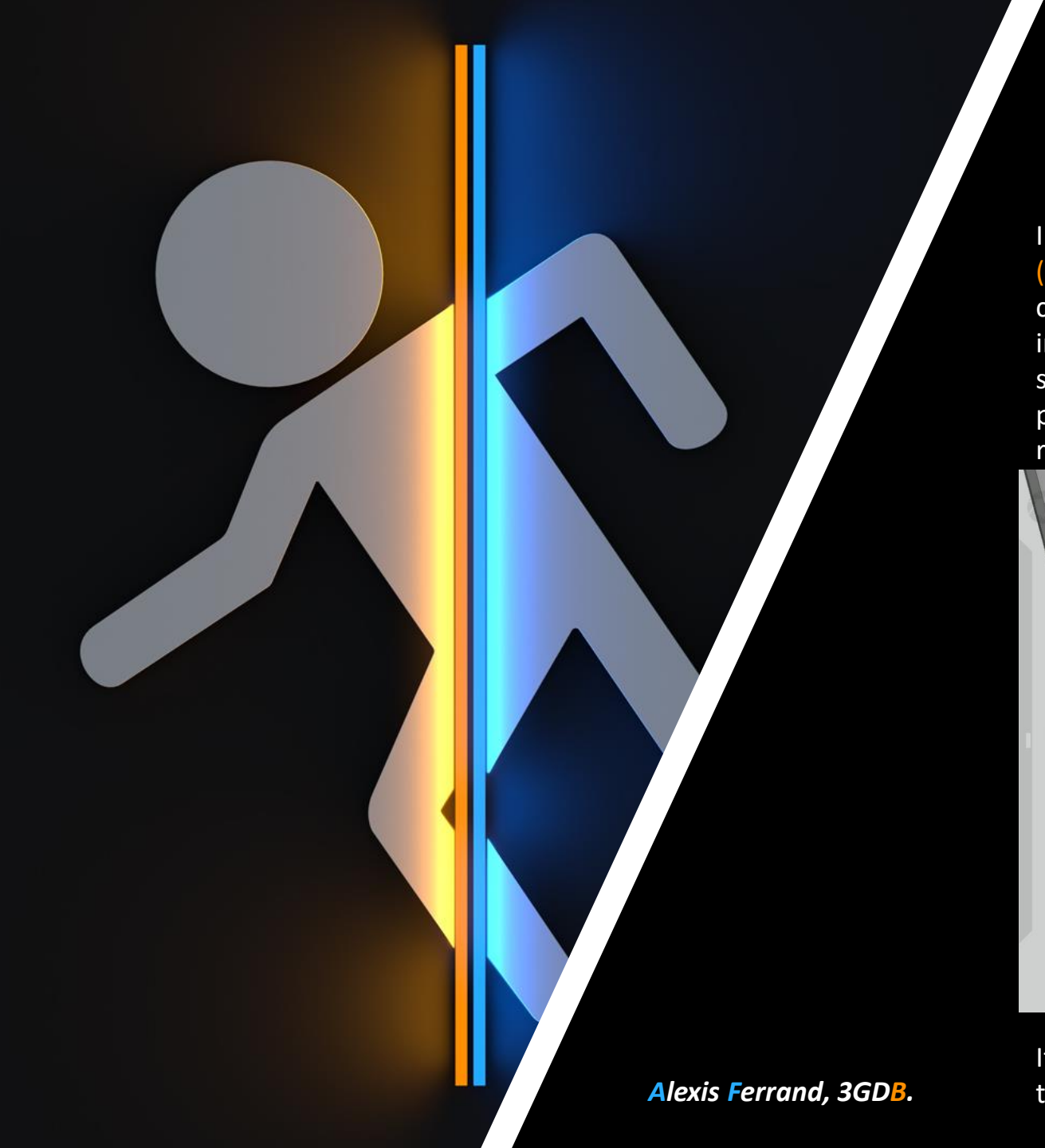
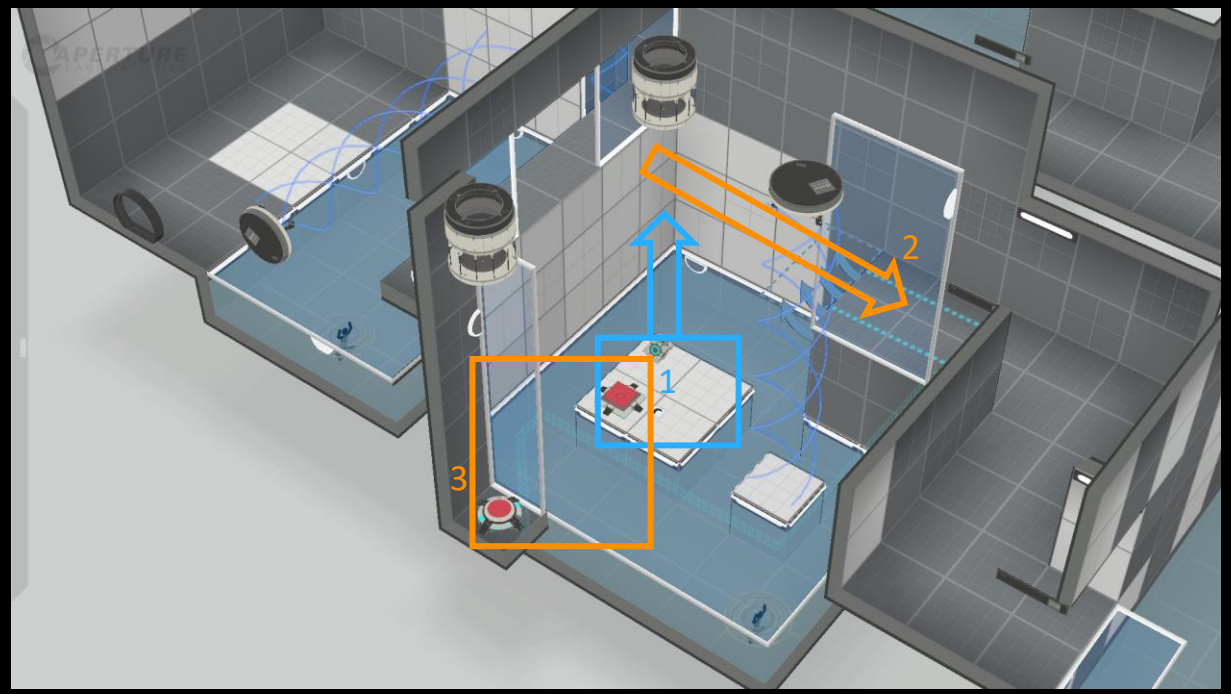


First Room Challenges
Part 2

In the second part, the player can use the same process to reach the exit (1) (2). I've placed another funnel to make sure he still have one at range and cannot stay stuck inside the room. A cube/weighted storage receptacle (3) interaction is optional, and unlocks a sphere spawn on the left that puts the sphere on another weighted storage receptacle and activates two foldable platforms. This interaction puzzle is a non-mandatory teasing for the next room.



If the player is efficient, he doesn't needs to put a step on the floor to cross the second part.

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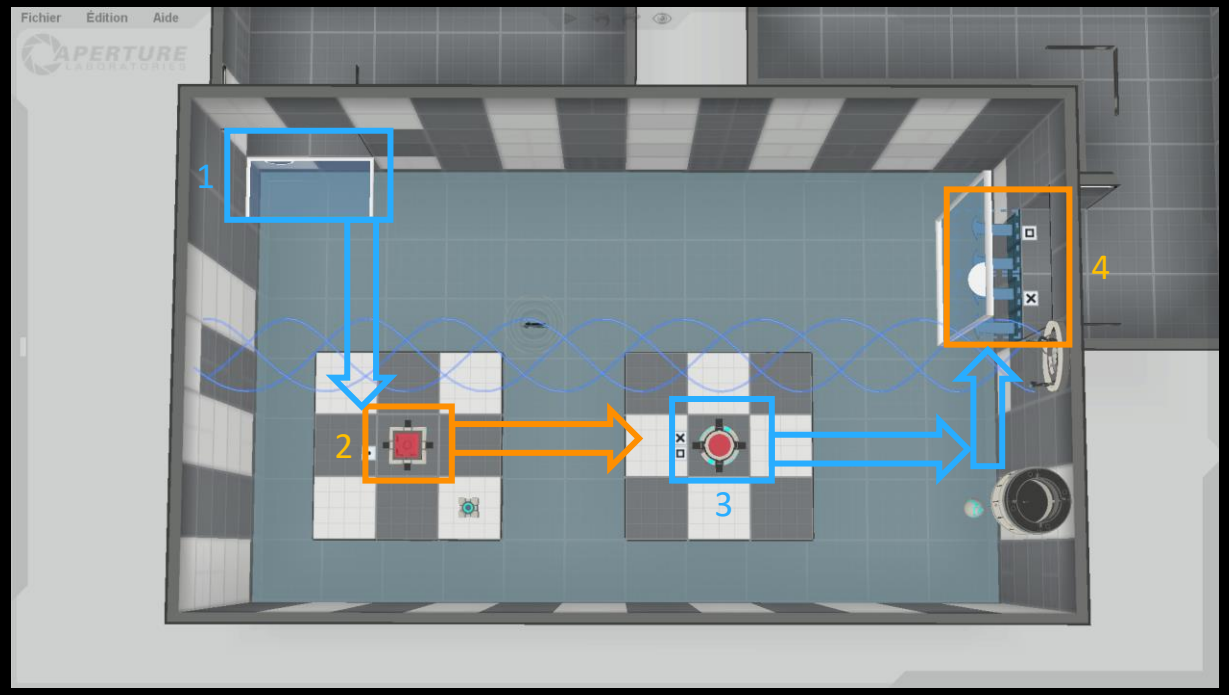
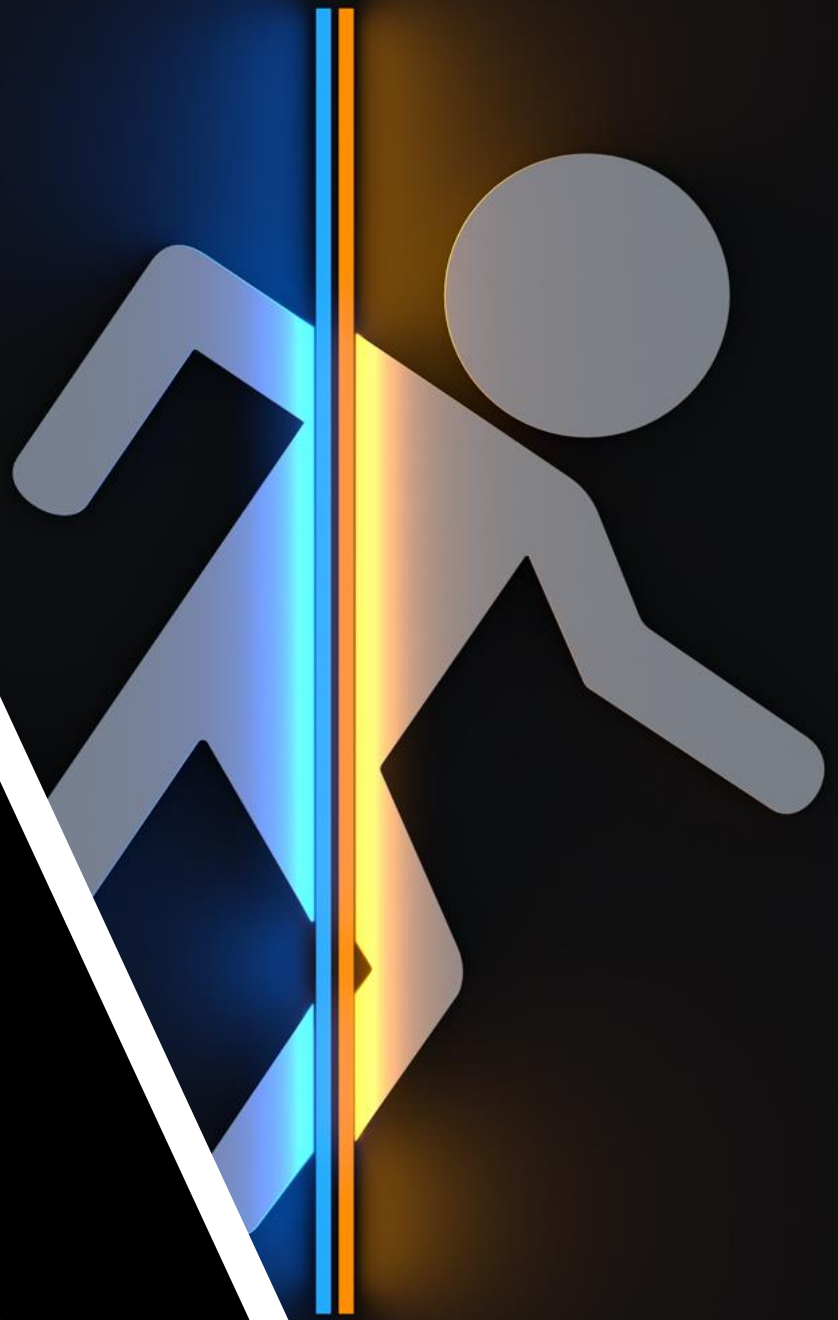
Second Room Layout

In the second room, the player enters form the left (1) and has to reach two foldable platforms on the right (4) to succeed. Most of the room is covered of goo, and some sort of checkerboard is set up on the floors and walls to test the player ability to use funnels and move across the room and move objets with it (mandatory). The player has to activate a first weighted storage receptacle with a cube (2) that activates a sphere spawn pipeline, and then use a sphere (3) to activate the two foldable platforms (4). These are mandatory to leave the room and reach the third one. The two islets in the middle of the room also serves as chill areas to the player.





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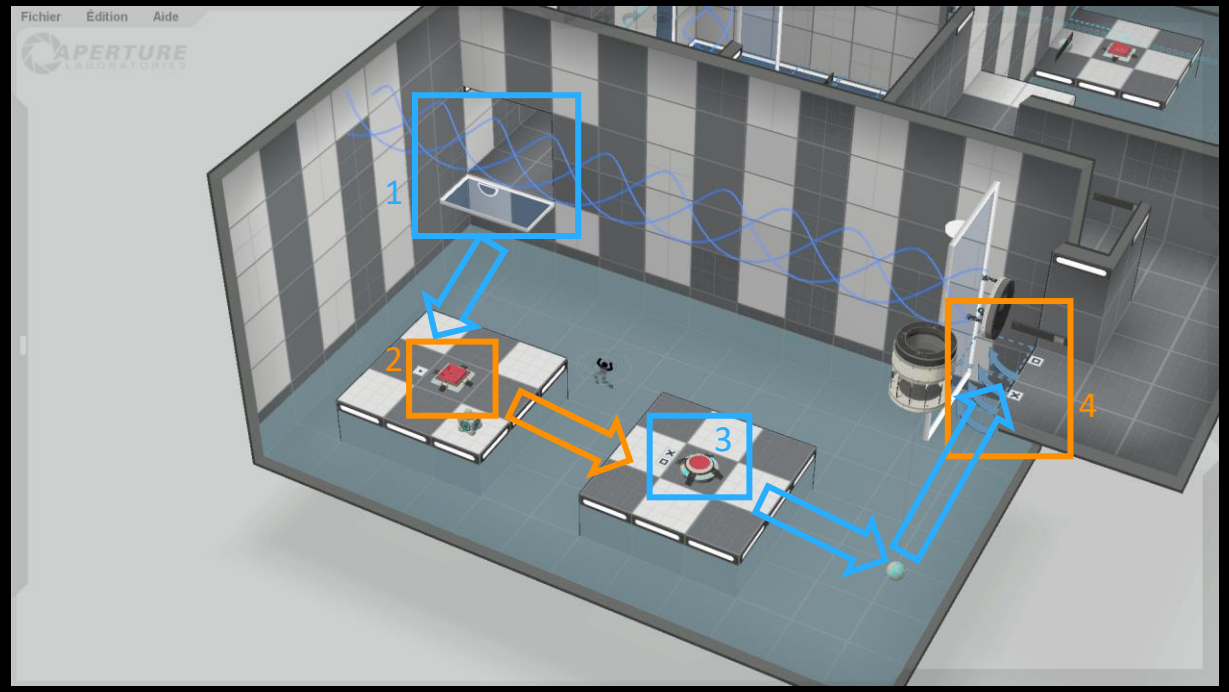
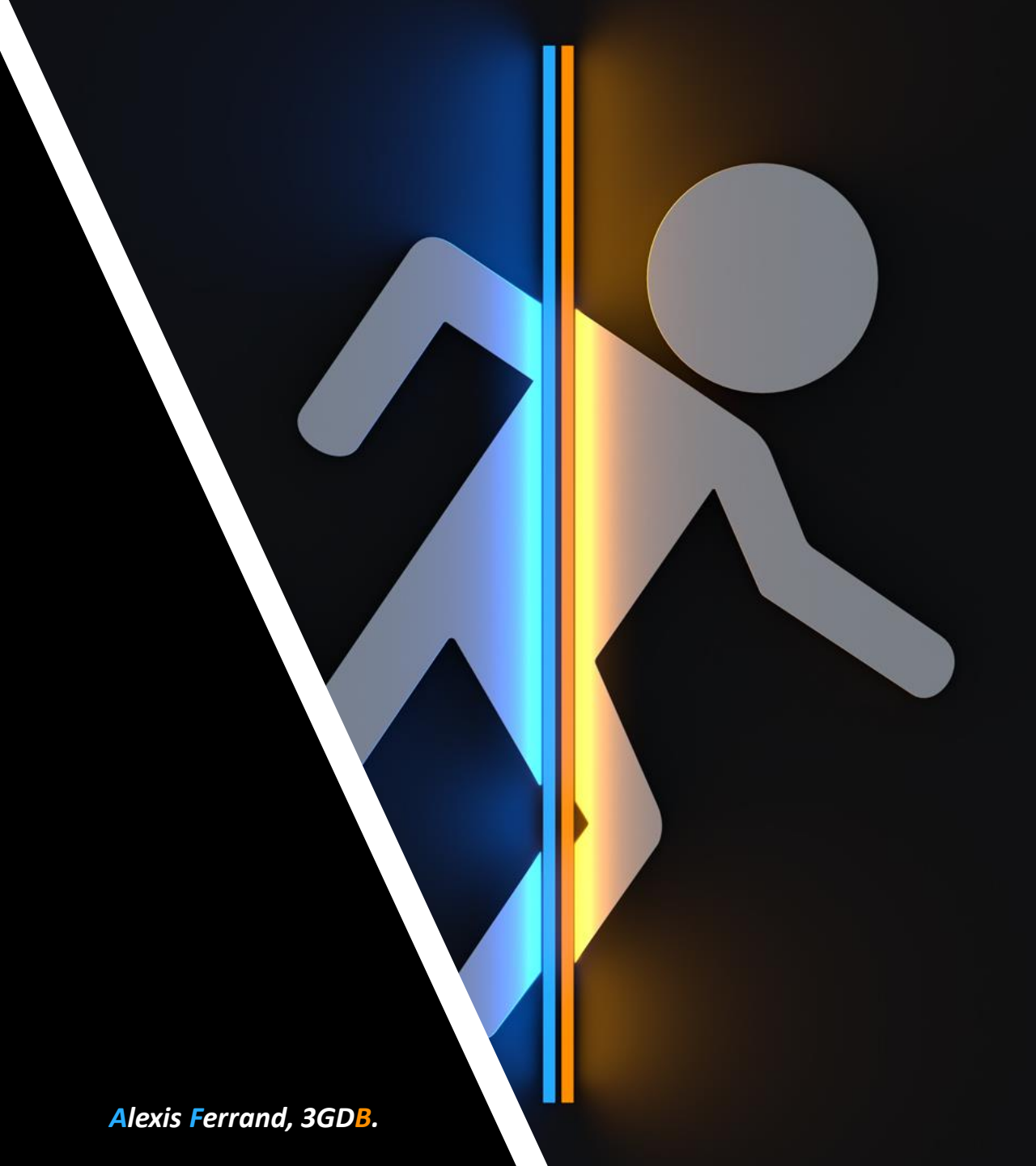
Second Room Challenges

Here is a perspective view of the second room. The challenges markers are the same.





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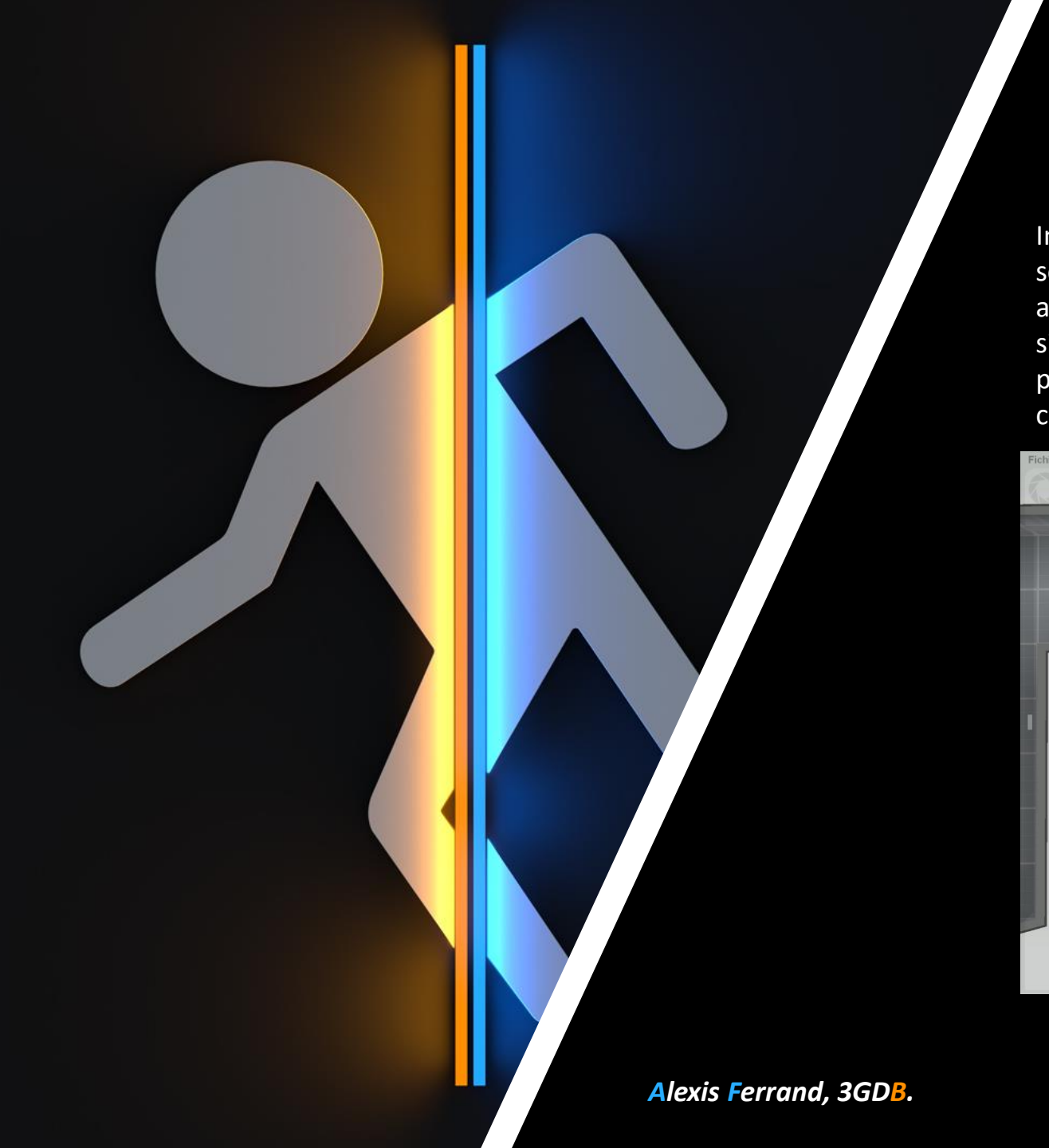
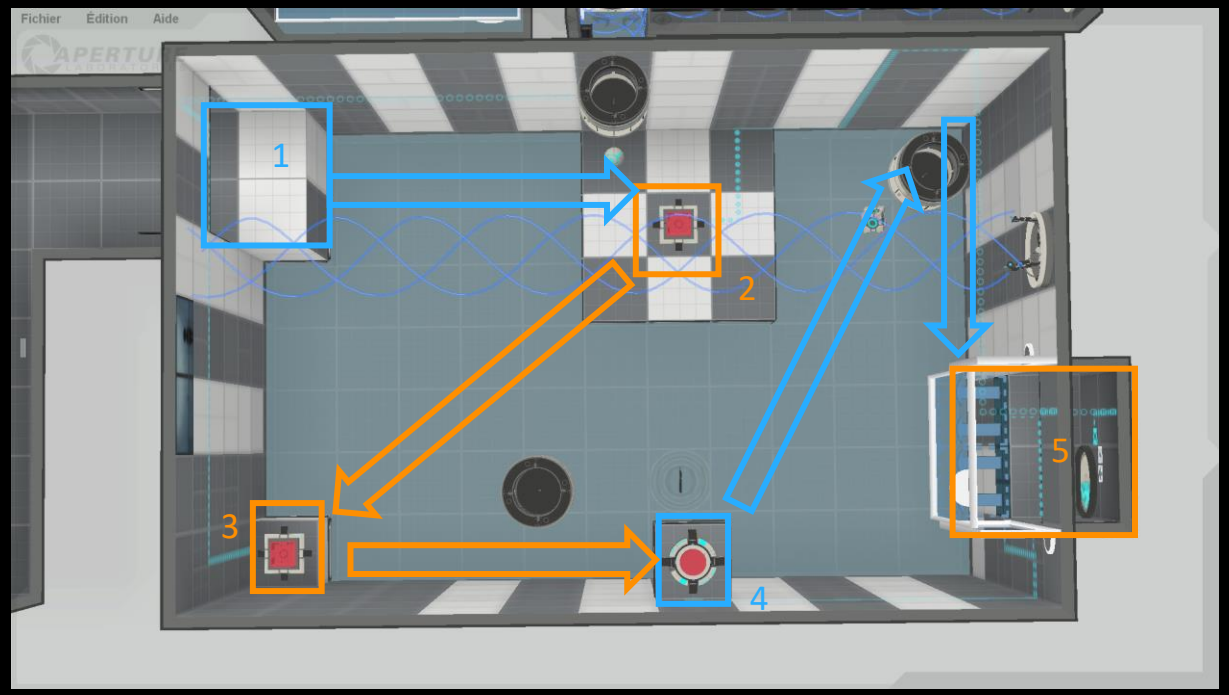


Third Room Layout

In the first room, the same types of islet and checkerboard is set like the second room. The player ability to move with funnels is necessary to cross again. The start (1) is on the left, the end (5) of the level is on the opposite side. The players has to complete another series of cube (2, 3) and sphere (4) puzzles with funnels to finally activate foldable platforms (5). The player cannot succeed without fullfill these objectives.



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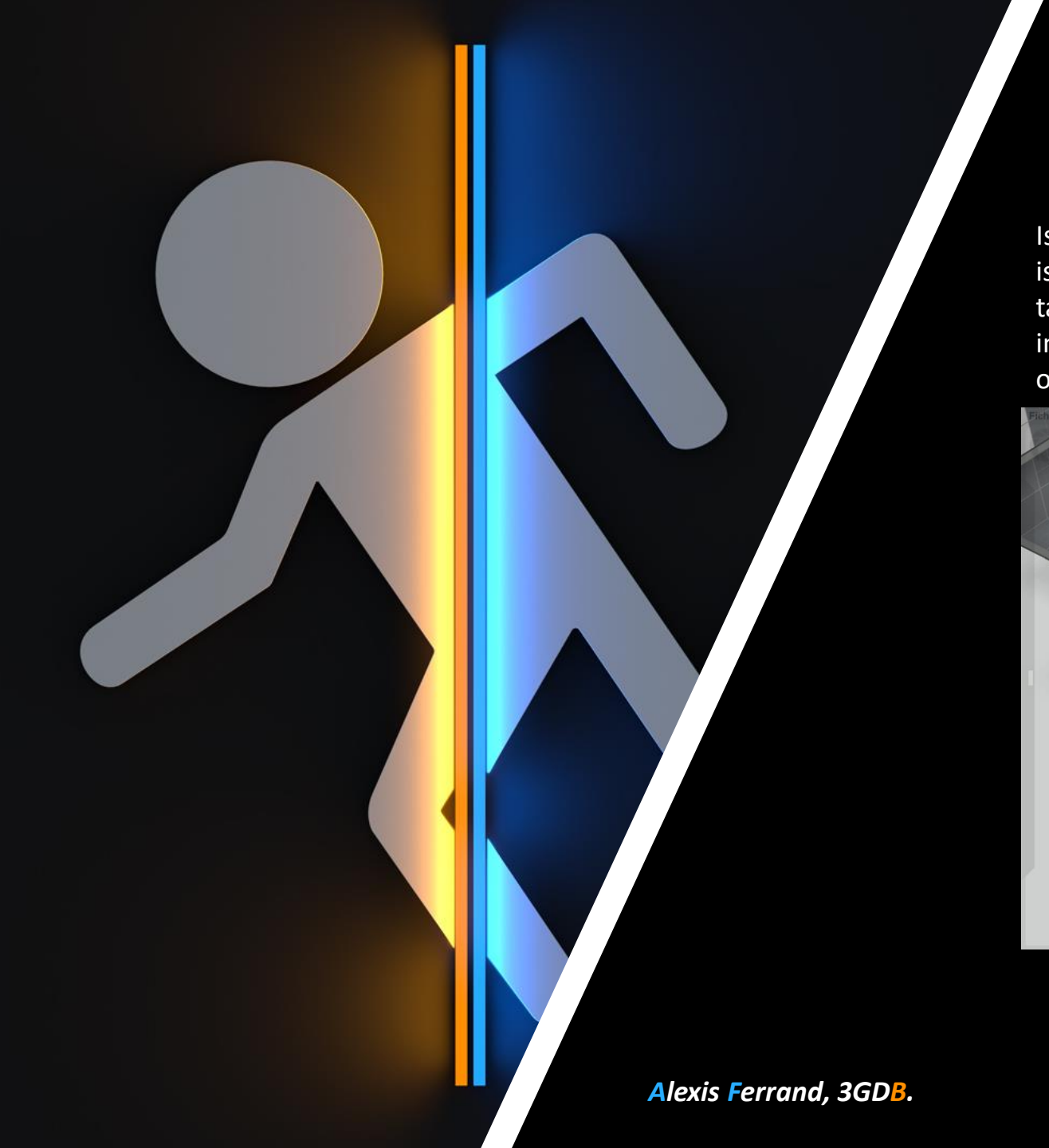
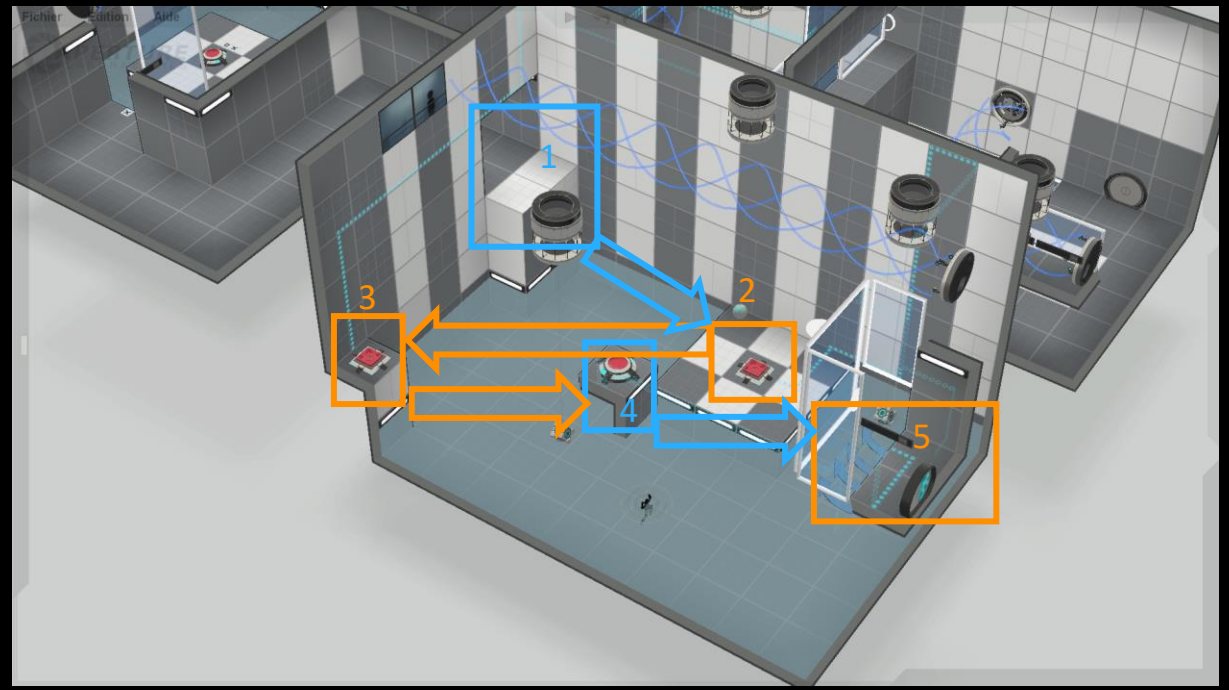


Third Room Challenges

Islets 3 and 4 are harder to reach, as the 3 is isolated on a corner, and the 4 is isolated and in height. Both are made of a 1^2 cube so they are also hard to target. The islet 2 is the only real chill islet for the player. Difficulty is increased by the height amplified parameter, objets movements and the lack of safe tiles to land.



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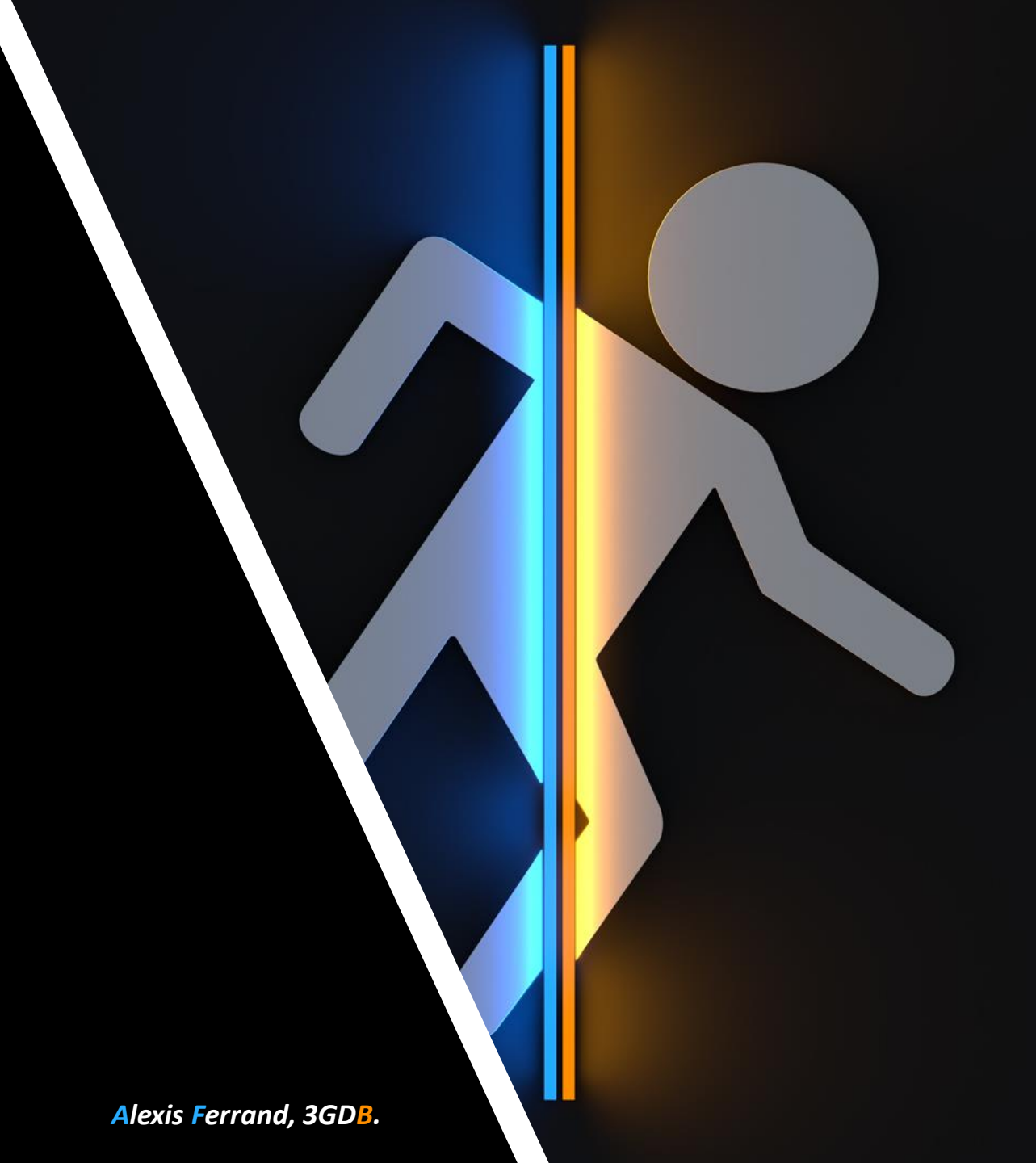
Level Patterns

Here are the patterns structures I used in this level. They mostly respect the « teasing, learning, practice and master » method.

1) Room 1, part 1 :
   Teasing : cubes/spheres, objects/funnels behaviors, goo.
   Learning : Excursion funnels behaviors
2) Room 1 part 2 :
   Teasing : cube/sphere/ weighted storage receptacle interactions, foldable platforms.
   Learning : cube/sphere/ weighted storage receptacle interactions → foldable platforms. (optionals)
3) Room 2 :
   Learning : objects/funnels behaviors, goo, cube/sphere/ weighted storage receptacle interactions → foldable platforms. (mandatory now)
   Practice : Excursion funnels behaviors, objects/funnels behaviors, goo, cube/sphere/ weighted storage receptacle interactions → foldable platforms.
4) Room 3
   Master : All.



Thank you for reading !

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