ROVERBALL:

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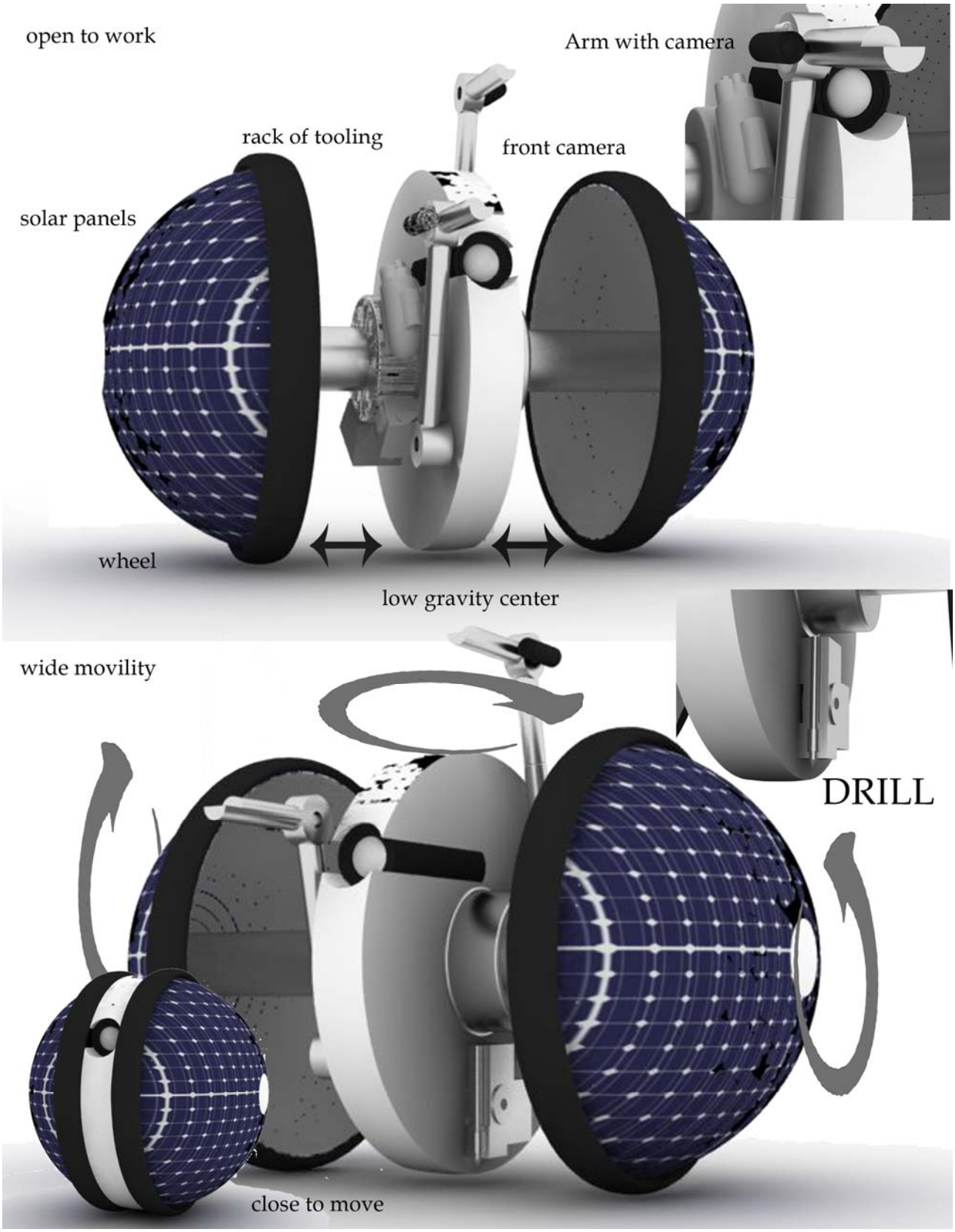
Introduction: the ROVERBALL achieve high mobility provide a base for exploration and experimentation.

Description: the robot have 3 different sections, the outside surface that it's give the ability to move, the inside were all the equipment, navigation, computers, arms, and the equipment section

the exterior is covered by flexible and high resistance solar panels to collect light to use it as electricity, the sides of the ball can move or rotate individually allowing the robot to turn left of right, spin, move forward and backwards, providing a high level of mobility the inside section or body provide a base for building it hold inside it the computer, navigation, antennas, batteries, wires, electric motors, sensors were all the electronic components are safe, all the instruments are placed inside of the ball the inside-laboratory of the ROVERBALL is protected from dust and accidental crashes when it moves that could cause malfunctions to the equipment, the inside-lab, camera, and the robotic arms remain steady by low gravity center of the ROVERBALL if its moves the body stays vertically, also the camera use the same low-gravity-center concept to send a vertical image all the time, the outside structure open it self to allow the instruments to scan the surface the robotic arms are fooled down by simple rotated mechanism it helps to increase the range of the tools, those tool will be placed in to a magazine attached to the inside body of the robot it help to place the tool in the right position so the arm can grab it and use it, each arm is set to use different tools, also the arm is set whit a secondary camera that can rotate 360° so it can show a wide perspective of the environment and recording the activities and the experiments, the last section is the drill, is place in the lower part of the body it used the weight of the rover to drill the land the same tool extract samples from the surface it have different storages to collect different samples, when the experiments are finish and the collect of the data is done the ROVERBALL close it's self and start rolling to the next location, the sides rotate independent from each other allowing the ROVER to turn over it self, avoid obstacles, and change direction if it's required the robot can move whit the side open.

The future planet exploration will help us to understand the mining of our self's, our goals', our strength, the extension of our dreams, but it will require to take new chances, used new and brave ideas and believing in our moral values, respect, responsibility, honor, friendship.

Thanks


open to work
Arm with camera
rack of tooling
front camera
solar panels
wheel
low gravity center
wide movility
DRILL
close to move