The United Launch Alliance Delta IV Heavy; one of the largest rockets in the world.

And it's not often NASA's Launch Services Program chooses to launch it – in fact, they've never launched it, until now.

I'm Nicky Fox, Project Scientist for Parker Solar Probe and tonight you will witness, up close and personal, this spacecraft being launched on her journey to the sun.

Watch as we encapsulate the spacecraft -- as you can see Parker Solar Probe to your left looks pretty small compared to these enormous fairing halves that protect her during launch.

That is because the Delta IV was made to launch satellites the size of school buses!

So why on earth would NASA need a rocket this powerful to launch our little 15-hundred pound spacecraft to the Sun?

That's right.
Pure and simple.

Parker Solar Probe needs the most launch power she can get to leave Earth and get to Sun.

It takes 55 times more energy to get to the Sun than Mars, and we need all of it to get into the right orbit around our star.

Parker Solar Probe, built by the Johns Hopkins Applied Physics Lab, will keep her protective heat shield between herself and the Sun once she's in that orbit.

The spacecraft will soar through the Sun's 3 million degree plasma atmosphere we call the corona, and give us scientists some incredible data to answer long sought after questions about the Sun.

Back on the launch pad, United Launch Alliance’s Delta IV Heavy is just the right rocket: three massive booster cores, a cryogenic second stage and even a third stage, specially made by Northrop Grumman to propel Parker over 94 miles per second at spacecraft separation.
Lift off in 5, 4, 3, 2, 1, Zero and liftoff of the Parker Solar Probe on her way to unlock the mysteries of the Sun's corona.

That was awesome.

Why don't we watch it again from the front side.

Bye bye Parker, the coolest hottest mission under the Sun.

Stay cool, baby girl.