



THE SELF-INFLATING TIRE

Technology presentation

October 2013

Proprietary CODA Development
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Presents ...



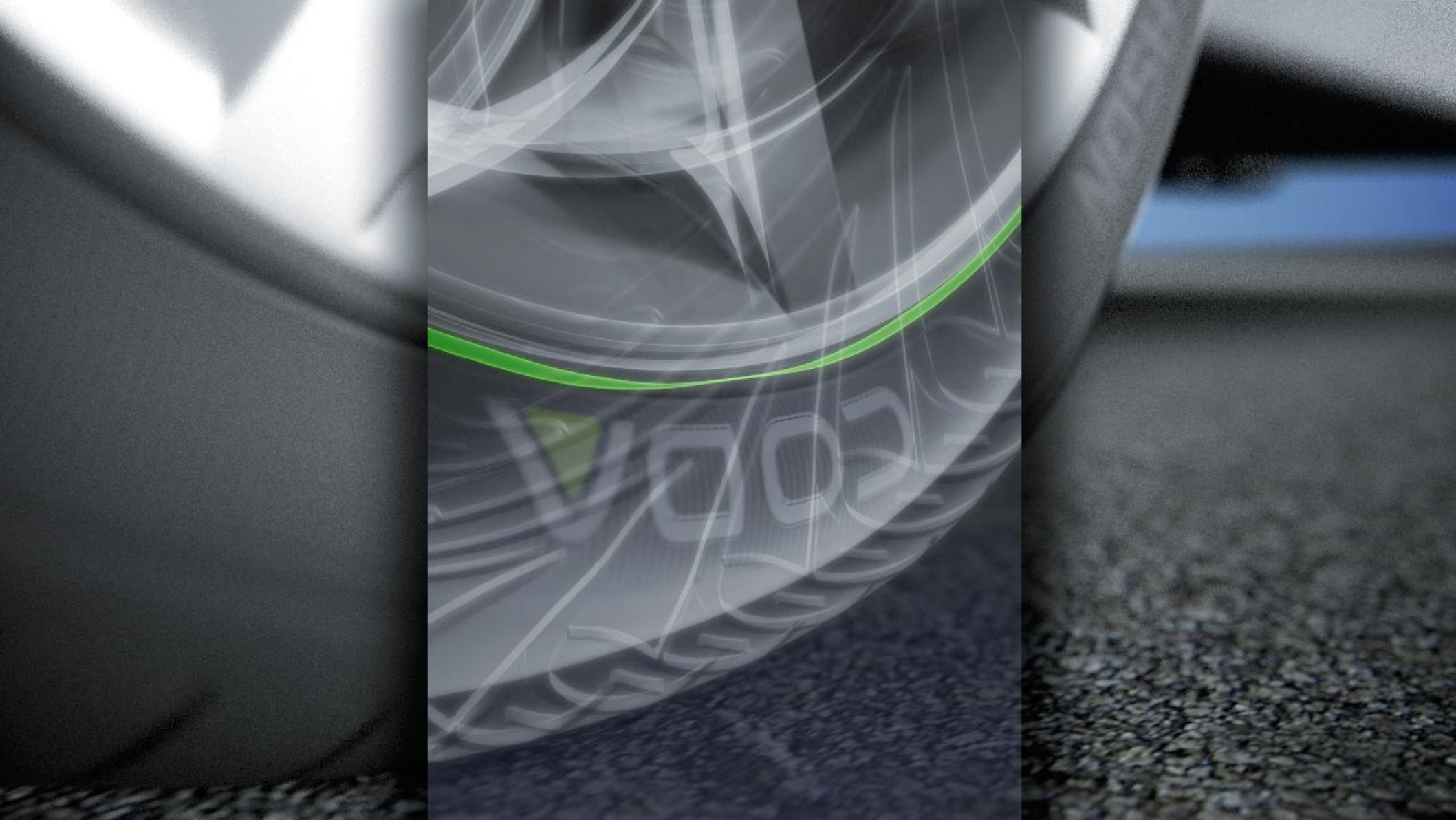
The first tire integrated, fully automatic tire pressure maintenance technology.



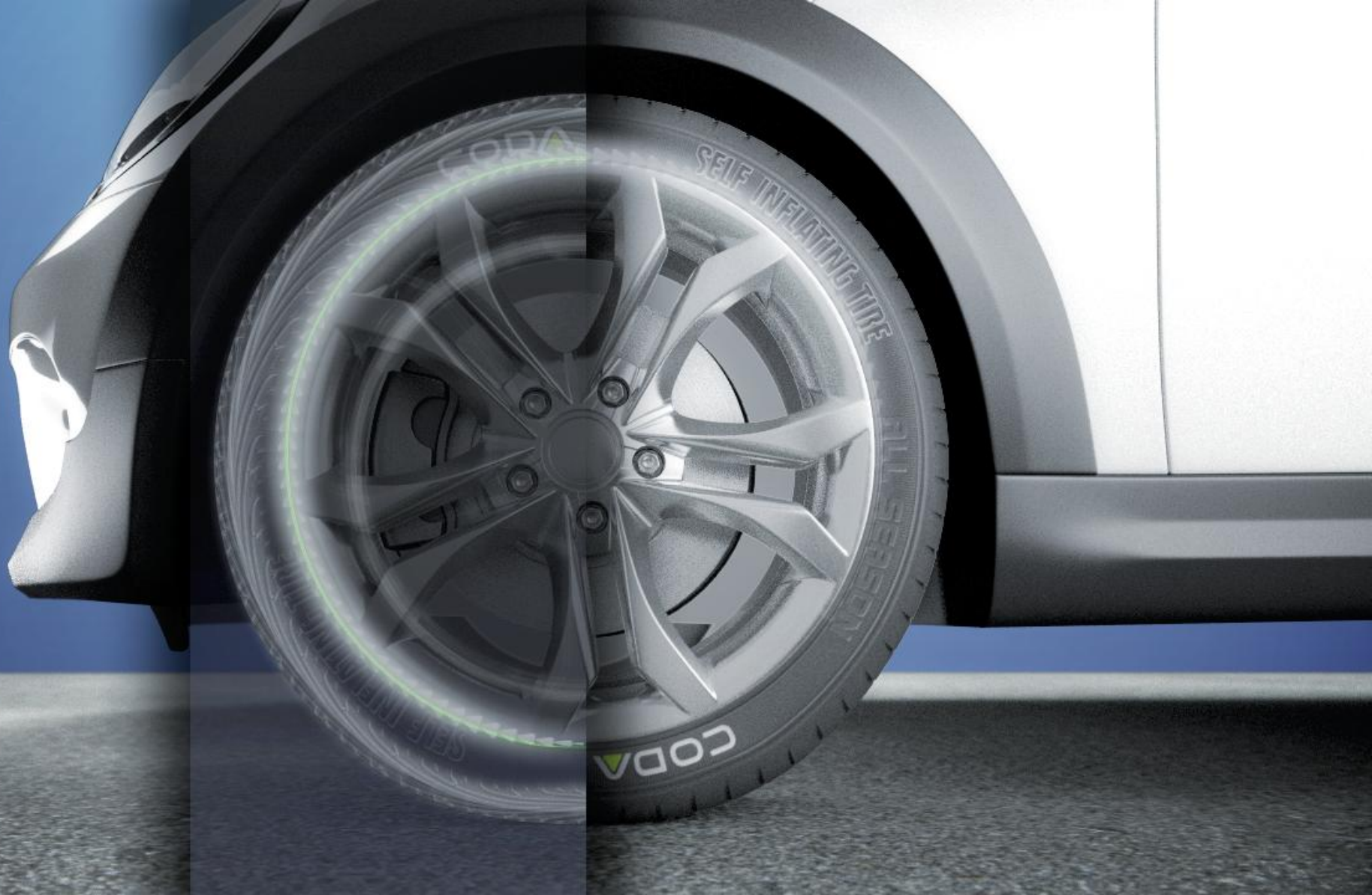
SIT uses the **energy of the wheel** to self-inflate the tire as needed.



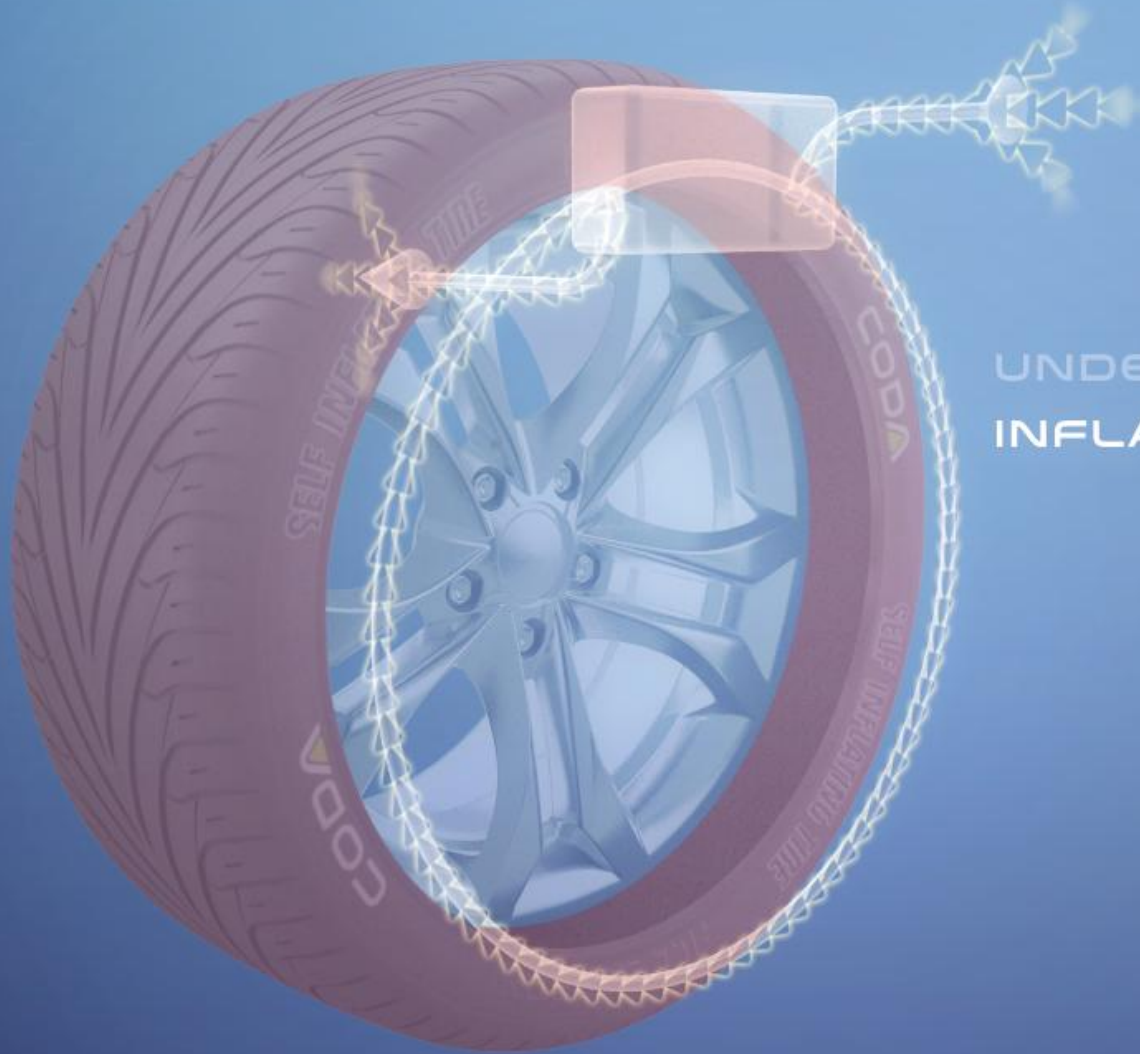
SIT uses the **energy of the wheel** to self-inflate the tire as needed. Keeping the tire always at its **optimum pressure level**.



The system integrates a **peristaltic tube chamber into the tire wall**. The chamber is kept **closed at its lowest point** by the normal tire deformation caused by the vehicles weight.



As the tire rolls against the road, the closure moves along the peristaltic tube chamber forcing more air into the tire with each wheel revolution.



UNDERINFLATED TIRE
INFLATION ON

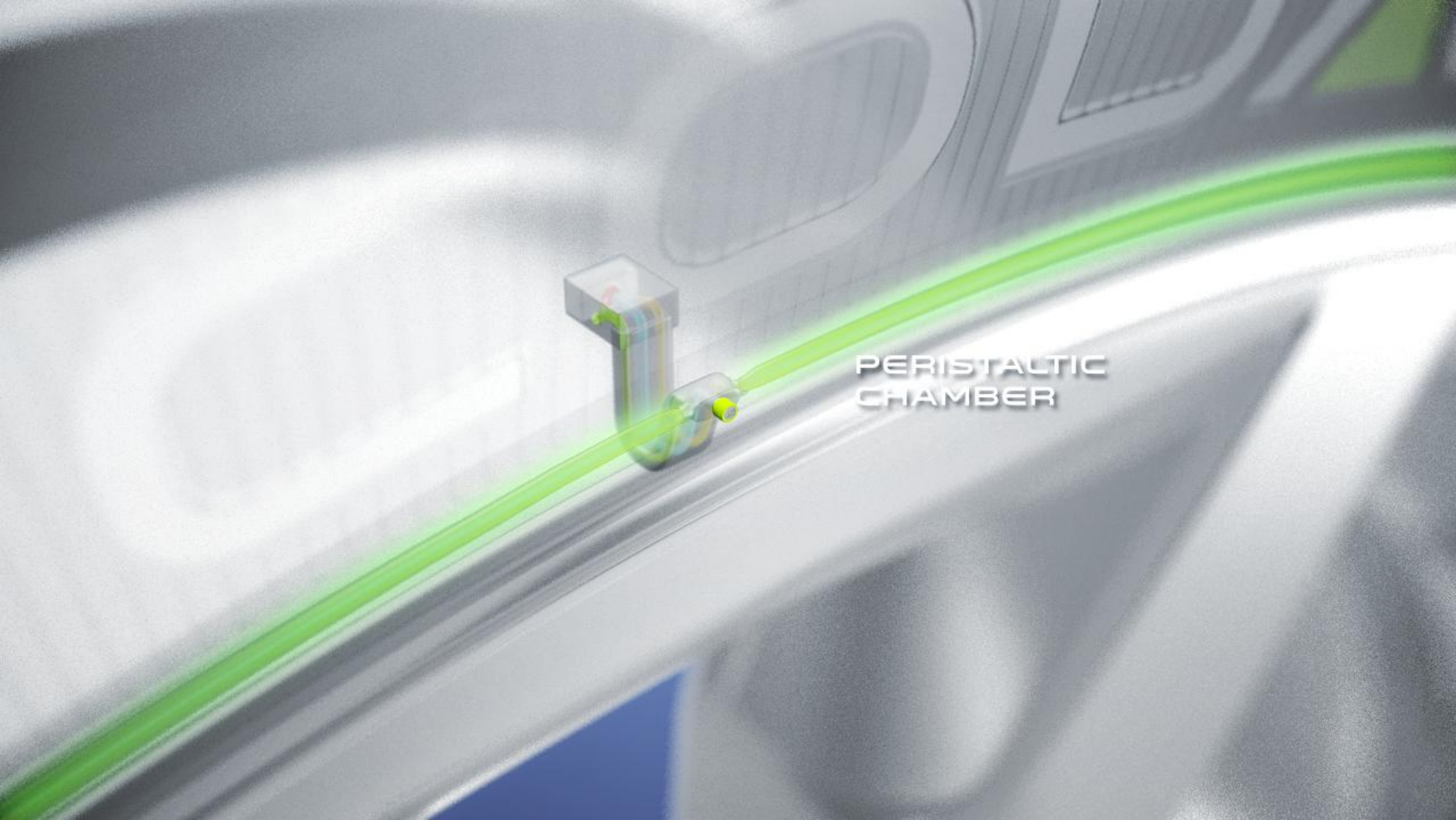
Inflation is activated **only when the tire pressure falls** below its optimal level.



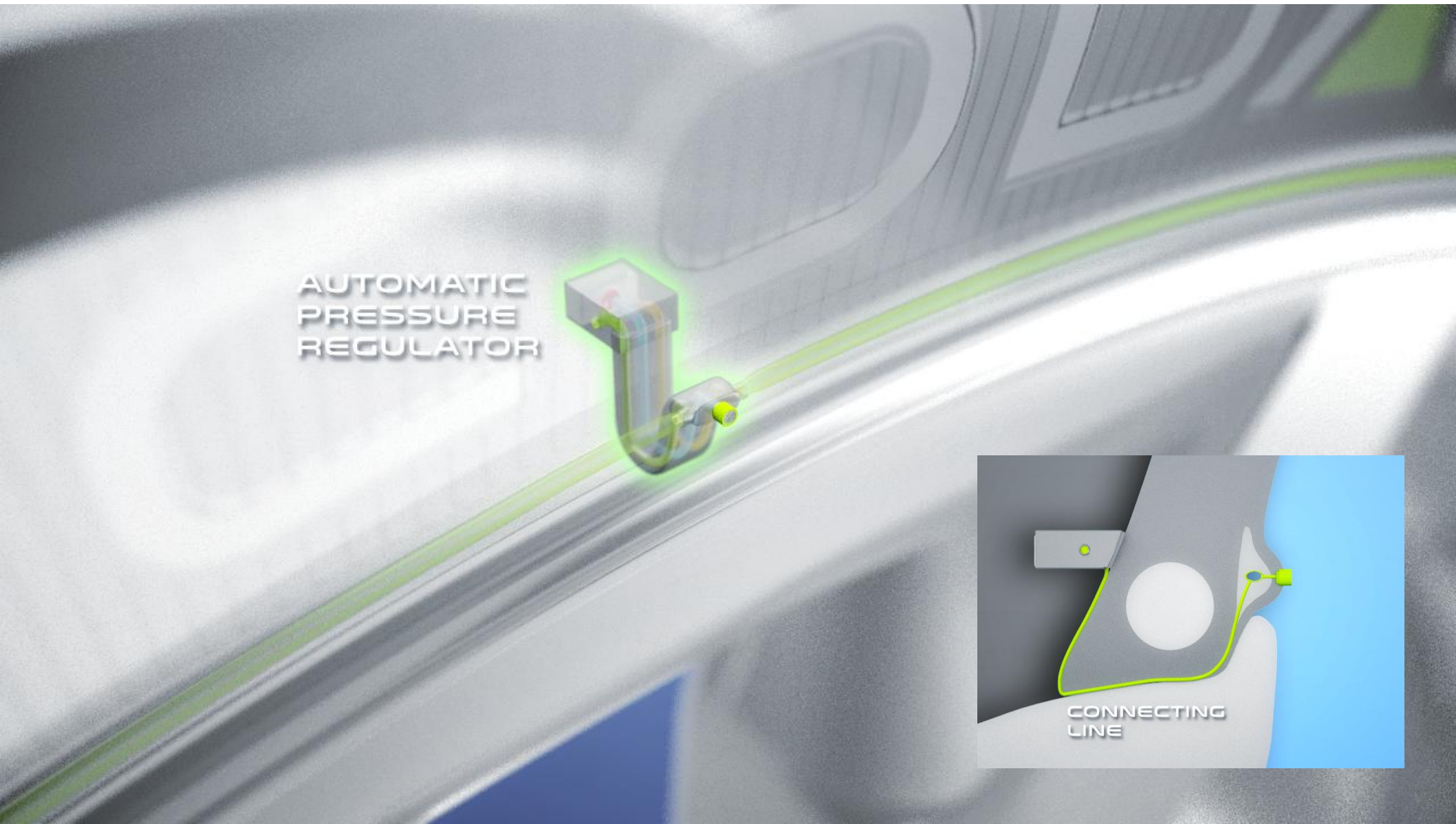
OPTIMAL TIRE PRESSURE
INFLATION OFF
INTERNAL CIRCULATION

(important for keeping
the system “of-load”
when not inflating)

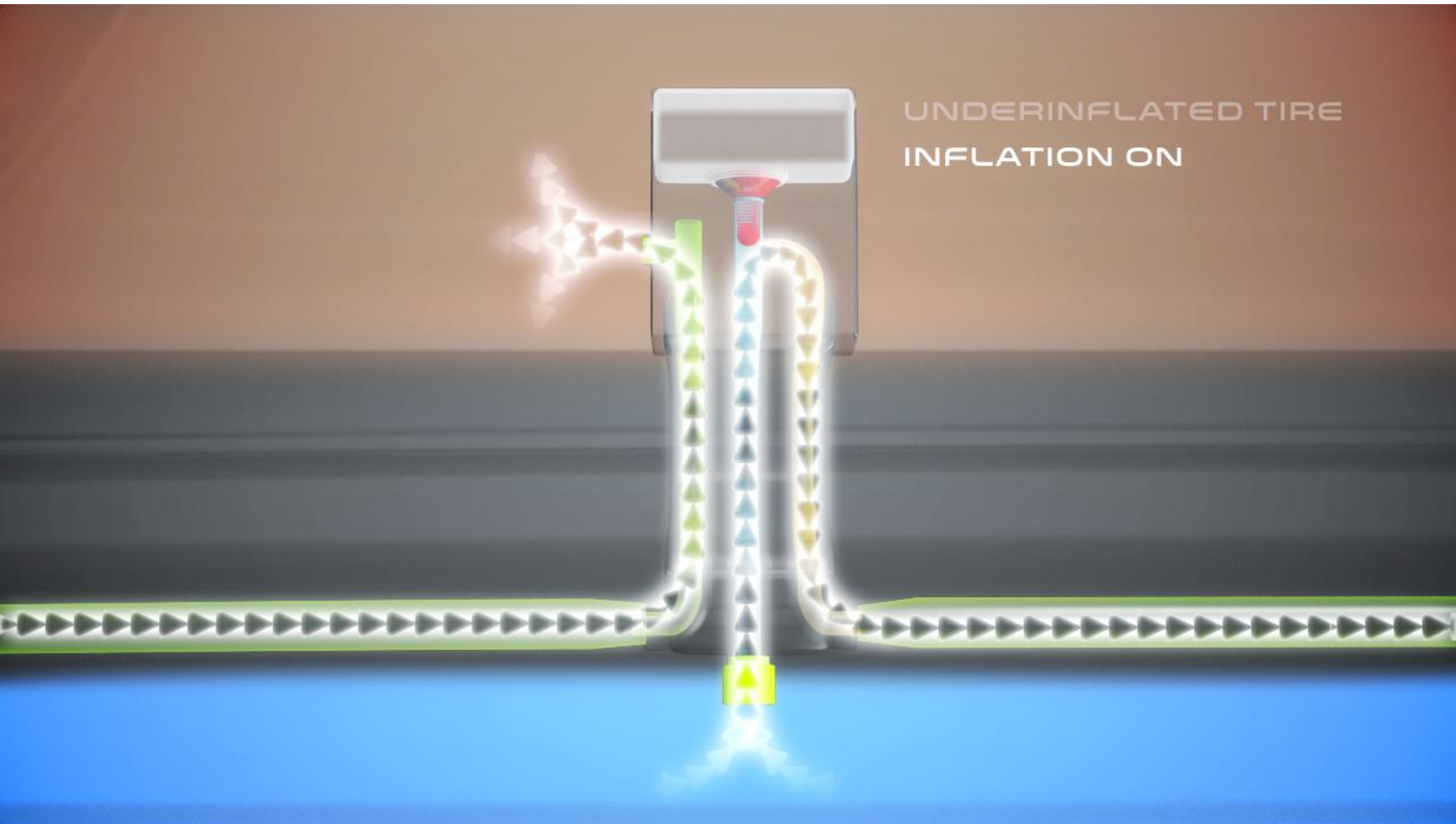
When the optimal tire pressure is reached, an automatic pressure regulator disables the intake of atmospheric air and activates continuous **internal air circulation** between the tire and the peristaltic chamber.



The clever SIT design is extremely **simple**, consisting only of two new tire components - the **peristaltic tube chamber**...

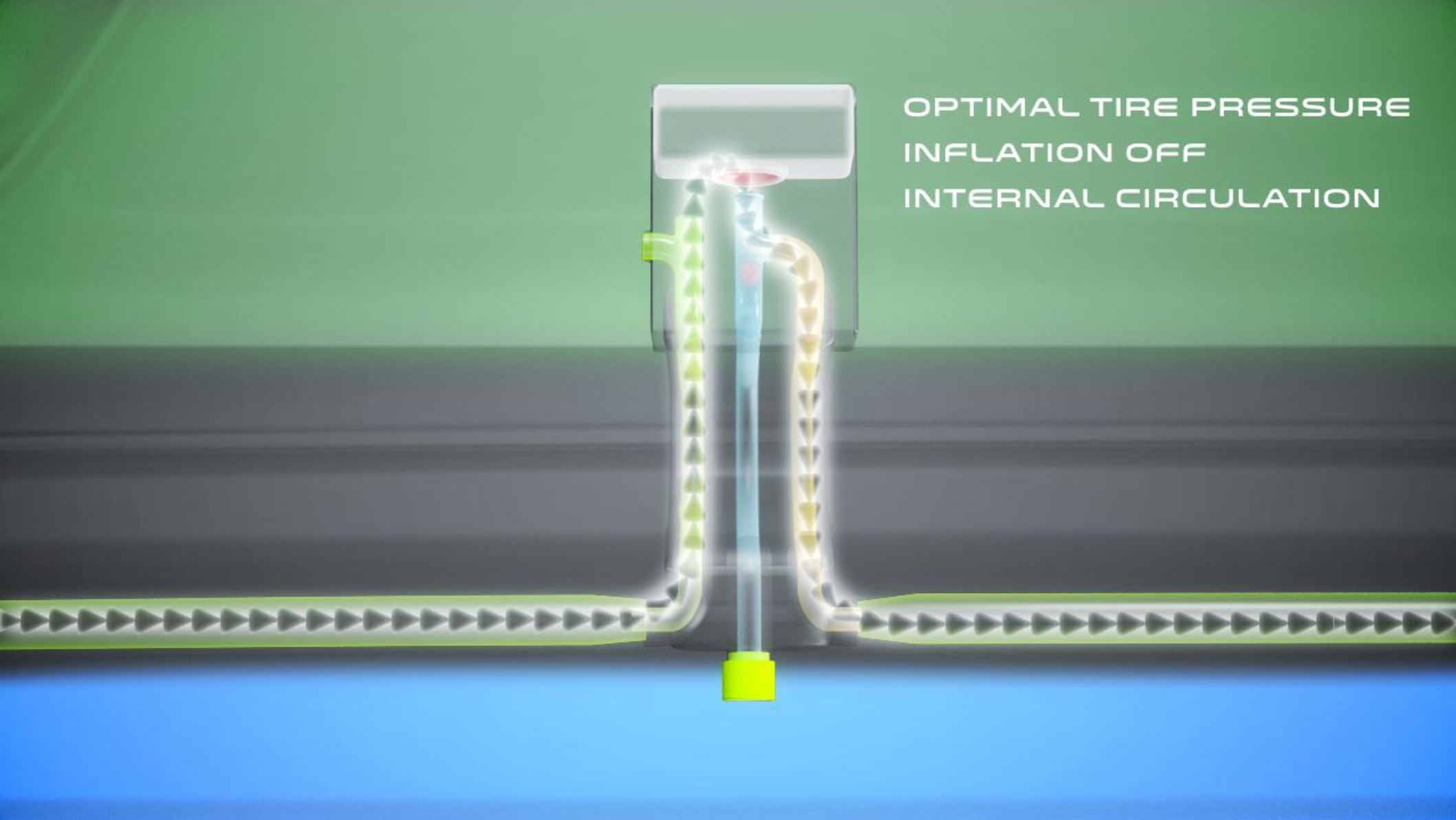


...and an automatic **pressure regulator** with interface connecting the tire interior with outside environment.



UNDERINFLATED TIRE
INFLATION ON

The pressure regulator enables **inflation from outside air** through filter only when needed...



OPTIMAL TIRE PRESSURE
INFLATION OFF
INTERNAL CIRCULATION

... and it activates internal air circulation when optimal tire pressure is reached.



As a result, **SIT tires will always operate at optimal operation pressure.**

This enables:

- Ideal vehicle handling and safety
- Optimal fuel consumption and CO2 emissions
- Improved tire longevity

All this completely maintenance free for the end user.

Driving for 1 km will compensate for typical monthly leakage of 2-3%



SIT is an original technology invented and patented by Coda Development.

We offer licenses for technology, technical support and cooperation to tire manufacturers with progressive thinking.

The change is coming...

The tire of the future is a Self-Inflating Tire.

CODA Development
Táborská 438/51
140 00 Prague, Czech Republic
info@selfinflatingtire.com
www.selfinflatingtire.com