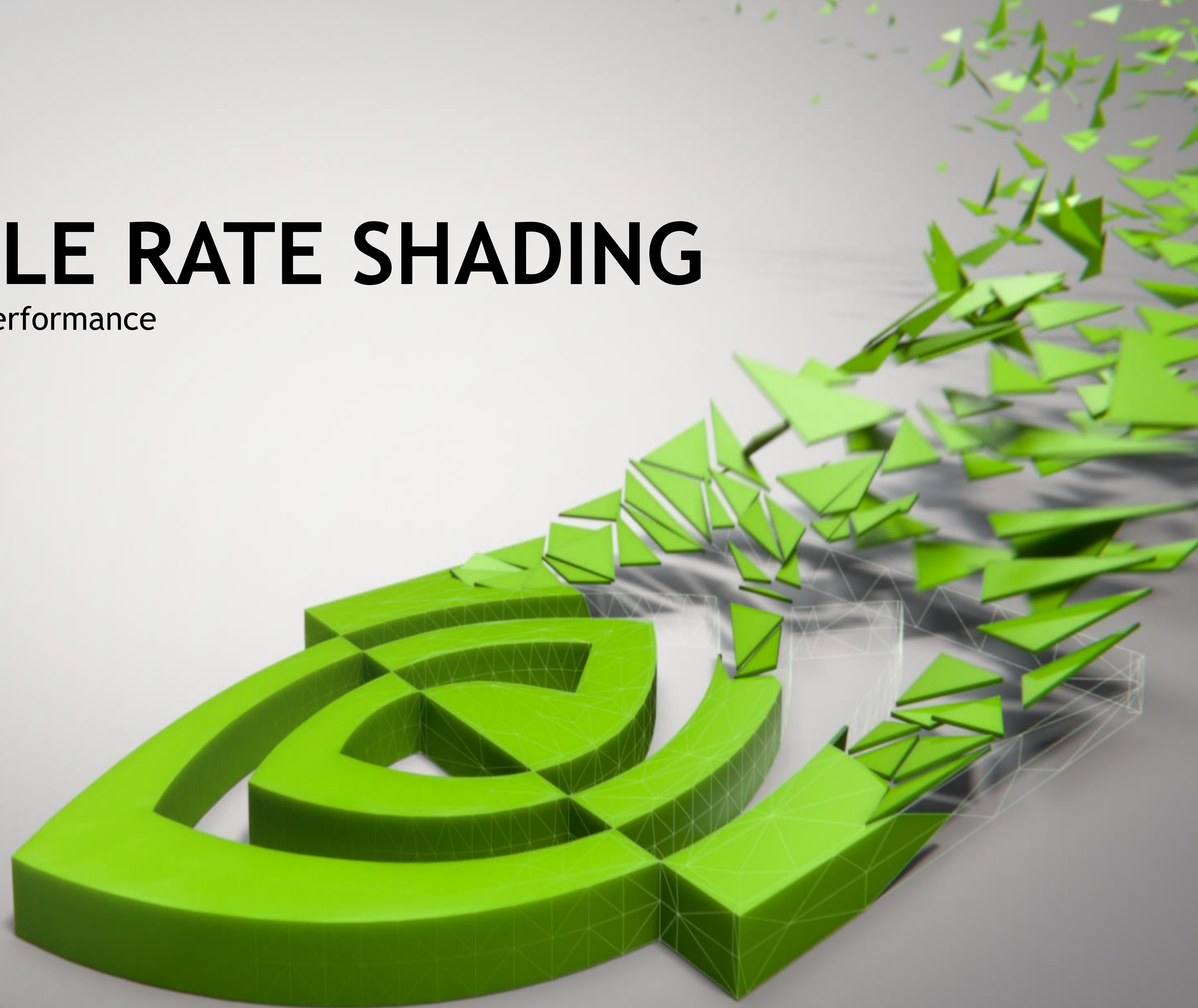


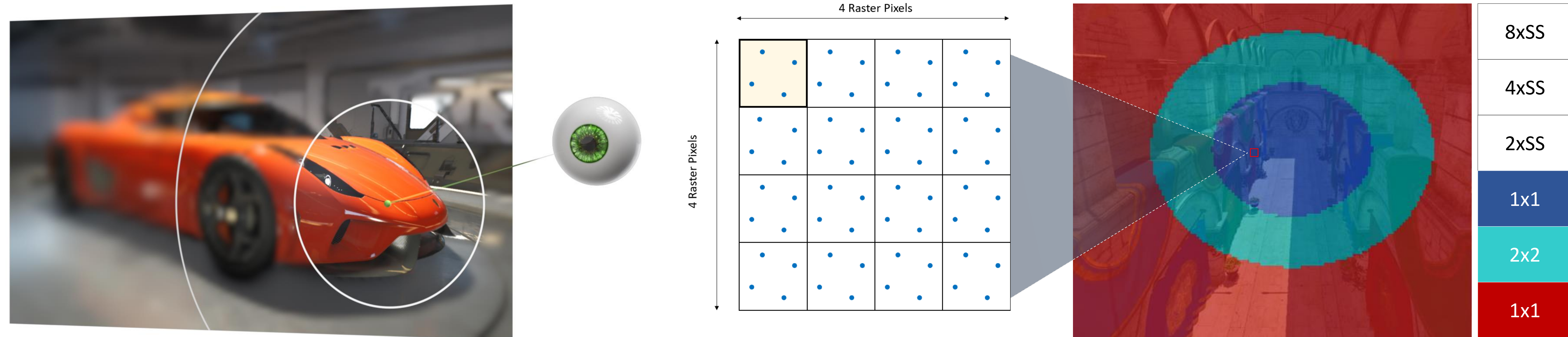
VARIABLE RATE SHADING

For improved VR performance

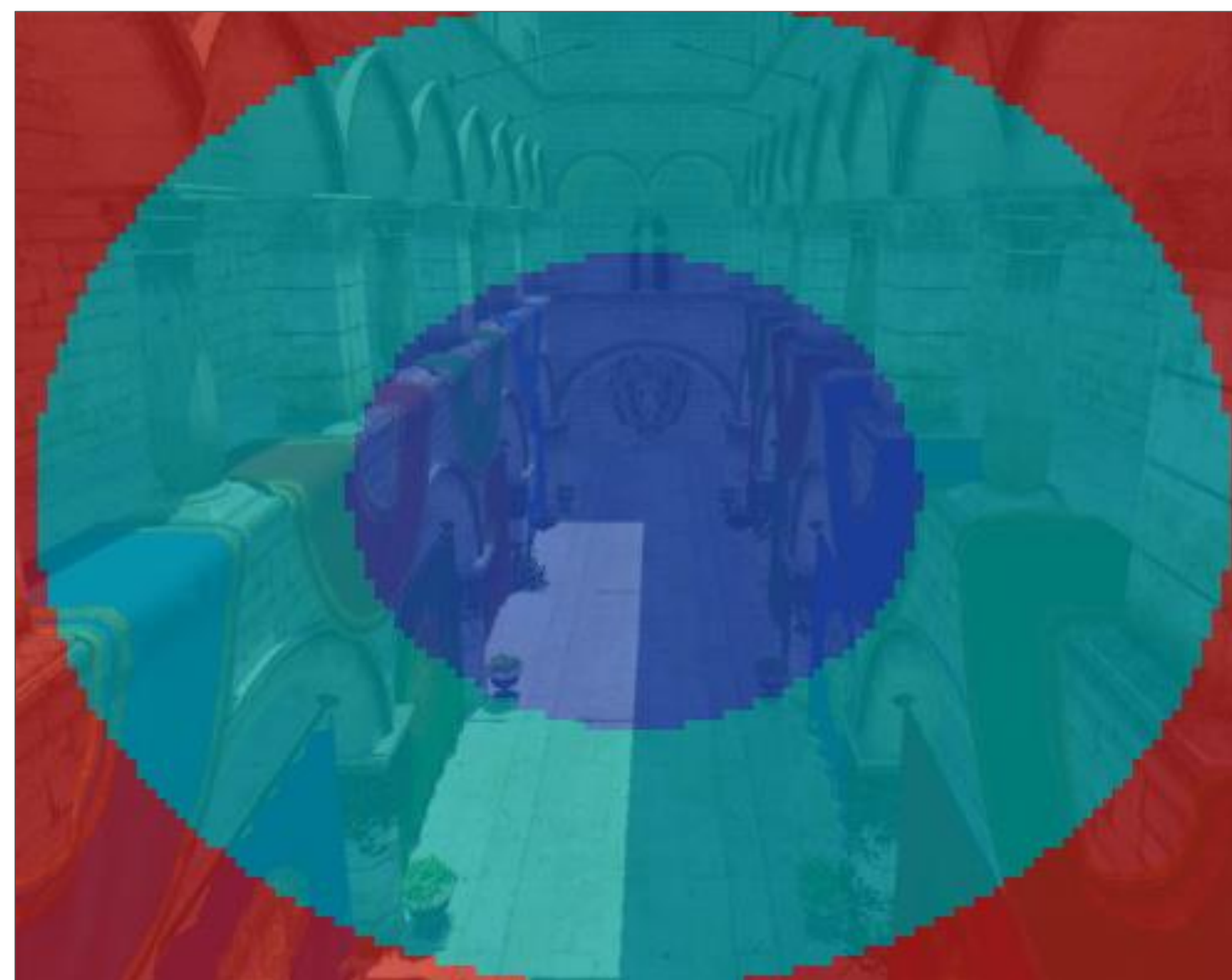


NVIDIA VRS

Optimizing VR Quality & Performance



VRS POWER & FLEXIBILITY



LENS OPTIMIZED SHADING



FOVEATED RENDERING



CONTENT ADAPTIVE

More info @ NVIDIA VRWORKS <https://developer.nvidia.com/vrworks>

HTC Vive Pro Eye



2 VRS Methods

	VRS	VRS Wrapper
Graphics APIs	DX11, DX12, OGL, VK	DX11 only
Usage	Continuum of all 3 VRS types - Lens Optimized, Foveated Rendering, Content Adaptive	Foveated Rendering only;
Pre-conditions	Forward rendering app	Forward rendering app and MSAA for SS
Functionality	Fully customizable arbitrary VRS patterns with Super Sampling and Coarse Shading modes	3 Regions customizable ellipses 6 Presets – 2 Image Quality, 2 Performance, Balanced, Custom
How to activate	App/engine integration	App/engine integration + eye tracker runtime integration
Modes supported	7 coarse shading modes 3 super Sampling modes*	Fixed preset shading rate modes, and custom configurability
Customizability	Most customizable	Less customizable
Ease of Integration	Standard integration	Easier integration

Some VRS Enabled Apps

