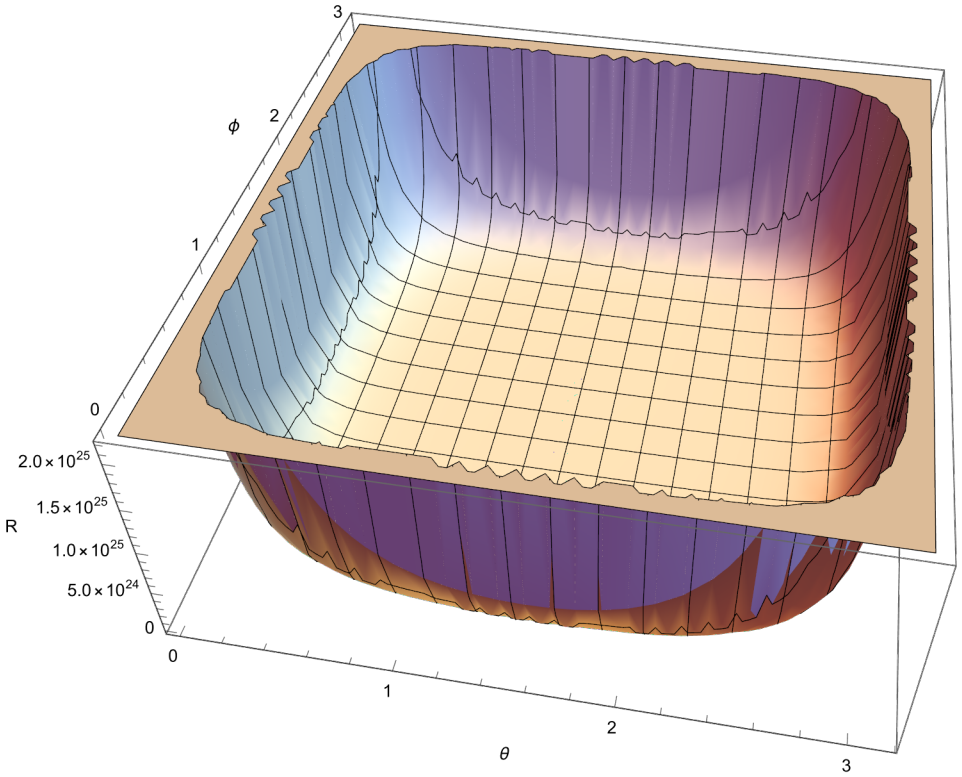
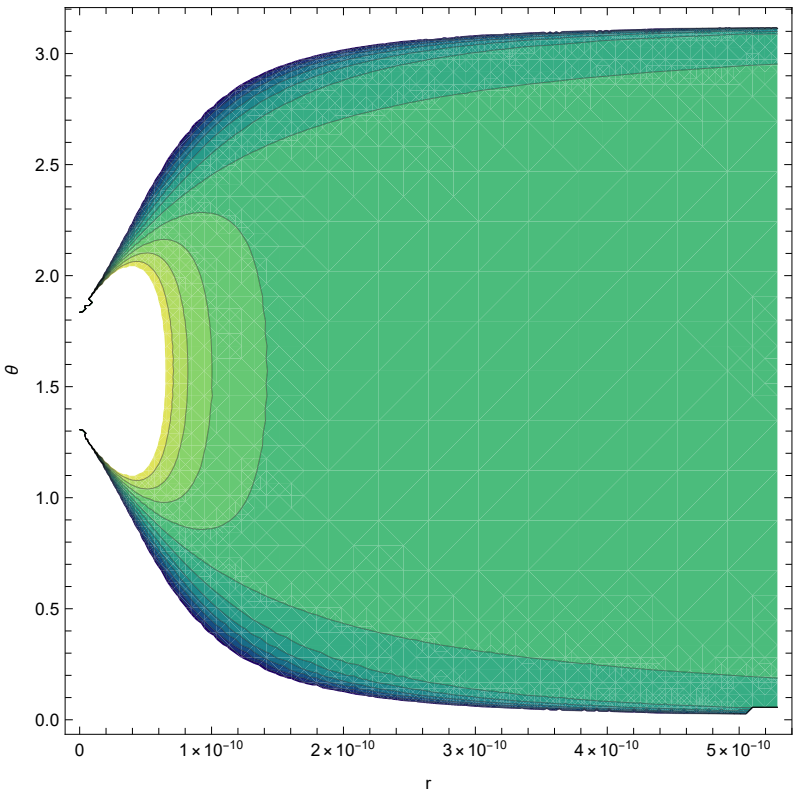
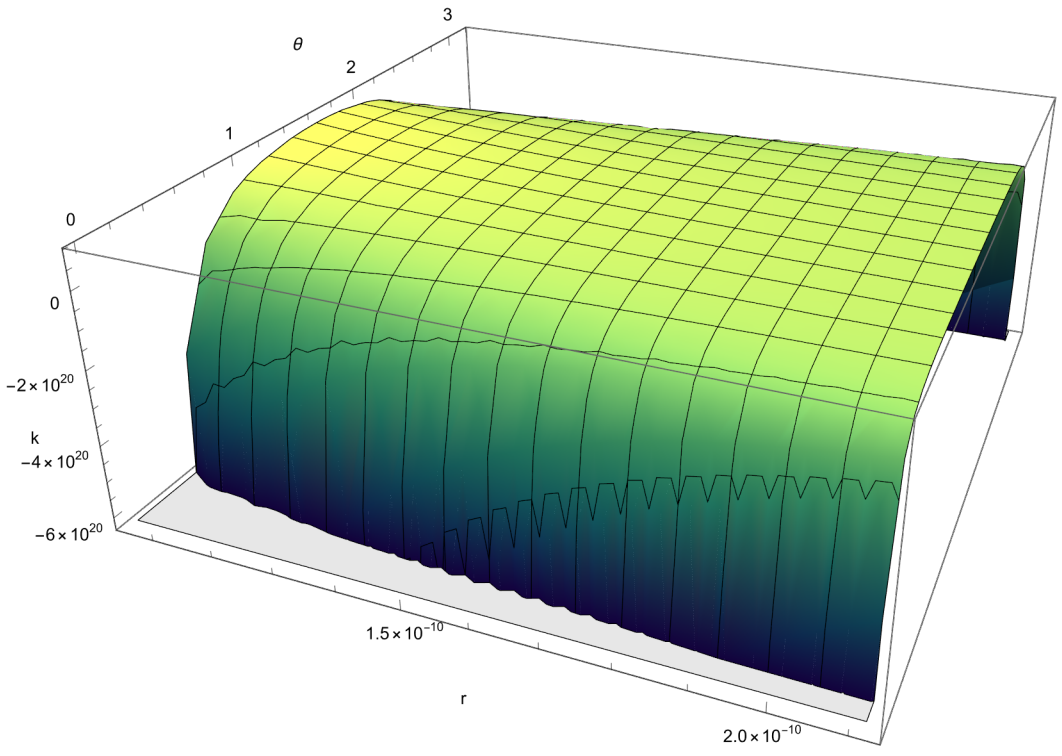
```
ClearAll;
γ = 0.9999;
w = w;
a = 0.52 × 10^-10;
t = 0;
r = 2 a;
Plot3D[(6 a^(2 γ-4) e^(r/a) r^(2-2 γ) Csc[θ]^2 Csc[ϕ]^2 Sec[2 w t] (4 + Sec[2 w t]^2)),
 {ϕ, 0, Pi}, {θ, 0, Pi}, AxesLabel → {"θ", "ϕ", "R"}]
```



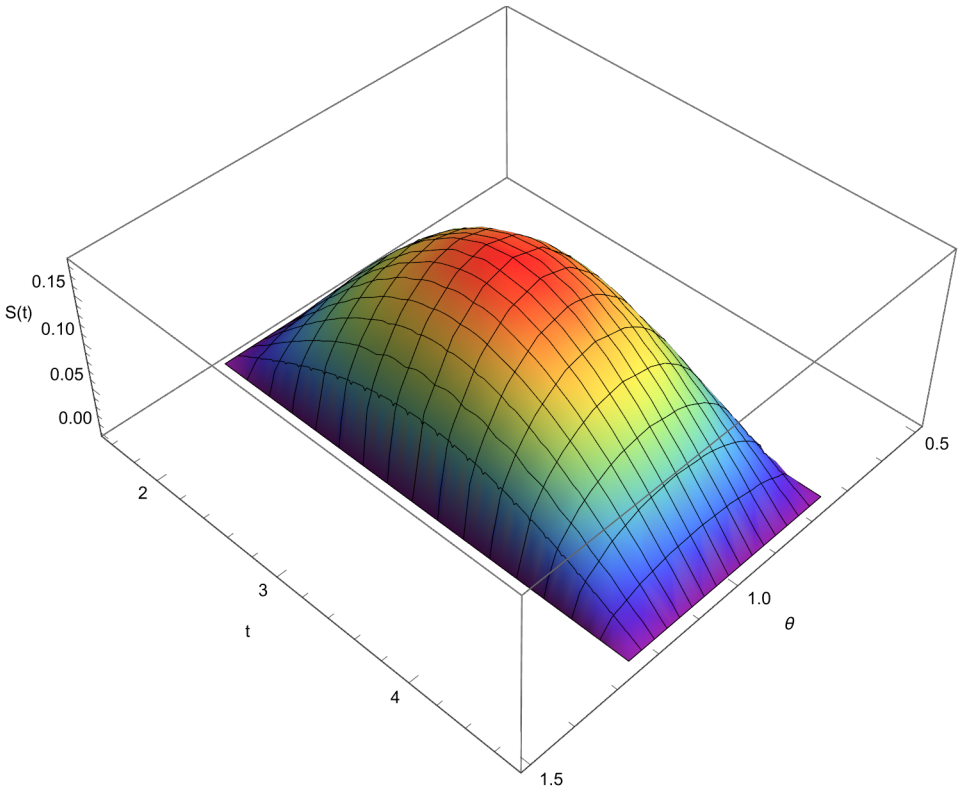
```
ContourPlot[(1 / r^2) * (1 - (Cot[theta]^2 / (.729 - 1 - r / (2 * .529 * 10^-10))^2)),
 {r, 0, 2 * 5 * .529 * 10^-10}, {theta, 0, Pi},
 ColorFunction → "BlueGreenYellow", FrameLabel → {"r", "θ"}]
```




```
Plot3D[(1 / x^2) * (1 - (Cot[y]^2 / (.9999733 - 1 - x / (2 * .529 * 10^-10))^2)),
 {x, 2 * .529 * 10^-10, 4 * .529 * 10^-10}, {y, 0, Pi},
 ColorFunction → "BlueGreenYellow", AxesLabel → {"r", "θ", "k"}, ImageSize → Medium]
```



```
scalefactor2 := r^(2 γ-4) a^(4-2 γ) e^(-r/a) Cos[θ]^2 Sin[ϕ]^2 Cos[2 * w * t];
ClearAll;
γ = 0.99999;
a = a;
r = 2 a;
T = 1;
w = Pi / T;
Plot3D[Sqrt[r^(2 γ-4) a^(4-2 γ) e^(-r/a) Cos[θ]^2 Cos[2 Pi / T * t]], {t, T / 2, 3 T / 2}, {θ, Pi / 2, 3 Pi / 2},
 AxesLabel → {"θ", "t", "S(t)"}, ColorFunction → "Rainbow", ImageSize → Medium]
```



```
scalefactorsquare := S^2[t] = r^(2γ-4) a^(4-2γ) e^(-r/a) Cos[θ]^2 Sin[ϕ]^2 Cos[2*w*t];
ClearAll;
γ = 0.99999;
a = a;
r = 2 a;
T = 1;
w = Pi/T;
ContourPlot3D[Sqrt[r^(2γ-4) a^(4-2γ) e^(-r/a) Cos[θ]^2 Sin[ϕ]^2 Cos[(2 Pi)/T * t]], {ϕ, 0, Pi},
 {θ, Pi/2, 3 Pi/2}, {t, 0, T/4}, AxesLabel → {"t", "θ", "ϕ"}, ImageSize → Medium]
```