

Vortrag im Hauptseminar SoSe 2025

Marvin Henke - 27. April 2025

Betreuer: Dr. Nikodem Szpak





Offen im Denken

Allgemeine Relativitätstheorie



- Allgemeine Relativitätstheorie
- Gravitoelektromagnetismus



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- Gravitoelektromagnetismus
- Rotierende Kugelmasse



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- EM-Felder



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- EM-Felder
- Gravity Probe B



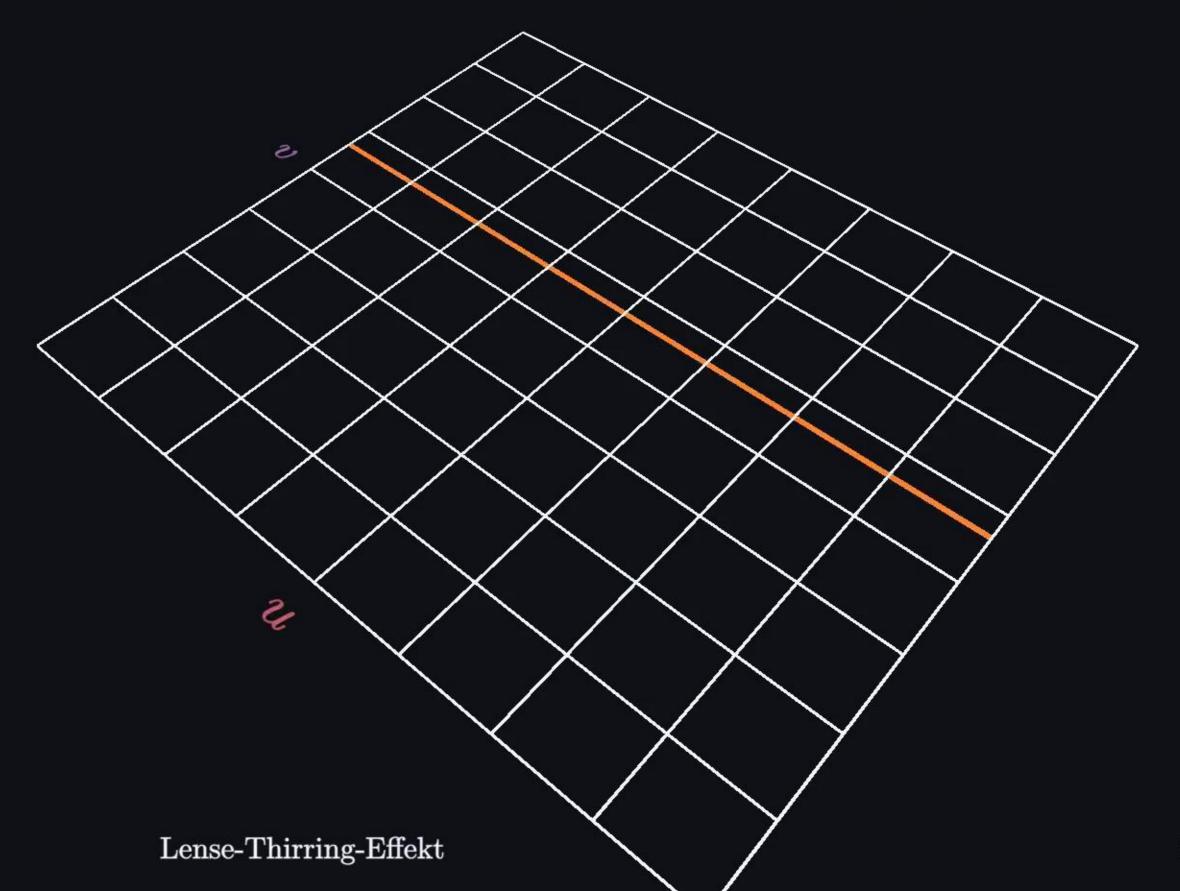
- Allgemeine Relativitätstheorie
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- EM-Felder
- Gravity Probe B
- Paper 1



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- Paper 1
- Paper 2

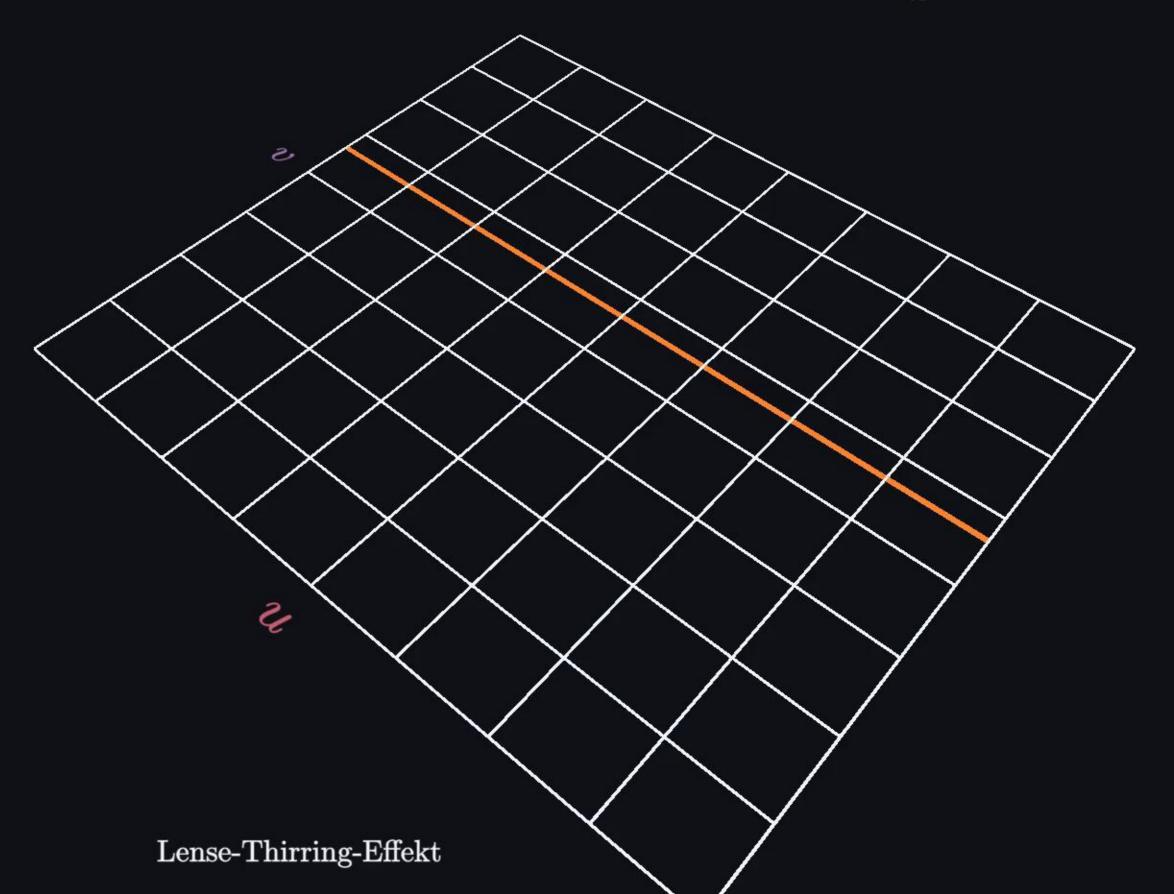








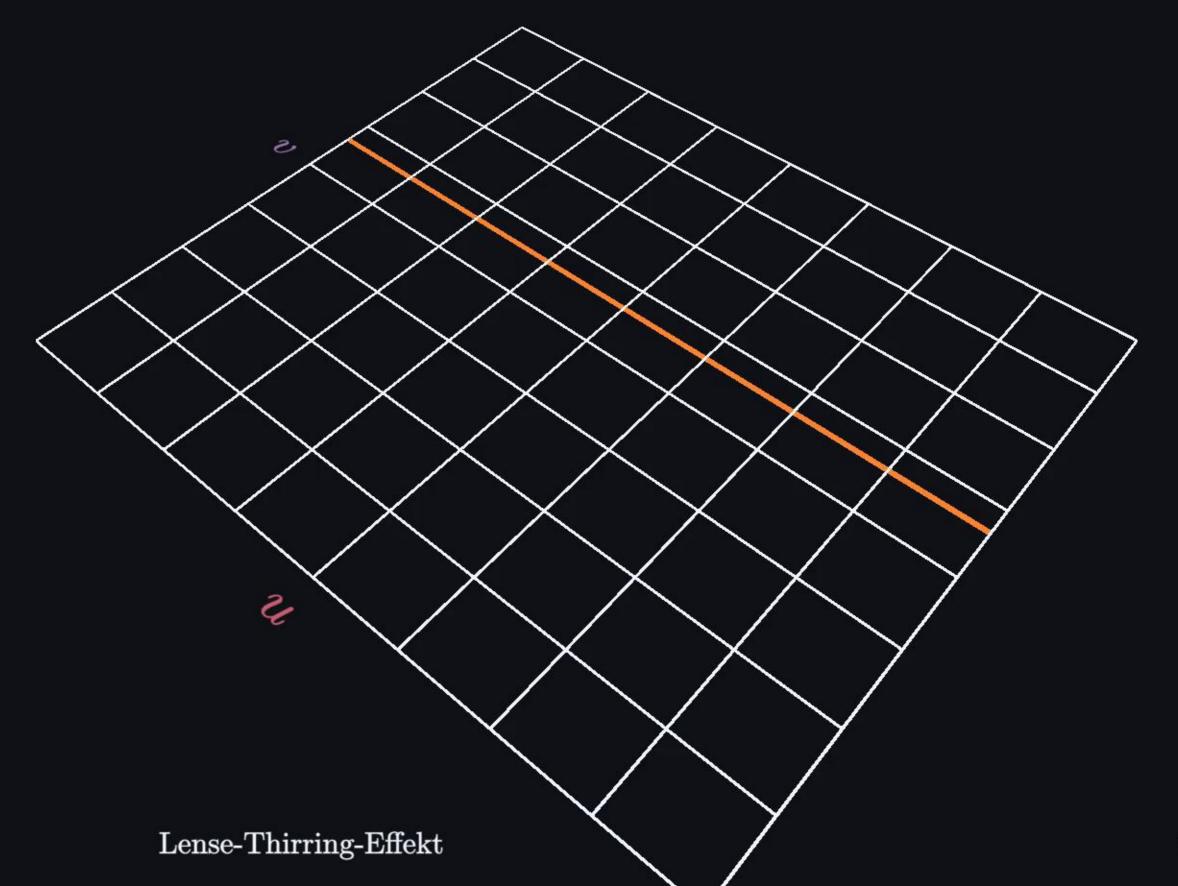






$$\vec{r}(\mathbf{u},v) = (\mathbf{u},v,0)$$

$$oldsymbol{g} = \left[ egin{array}{cc} 1 & 0 \ 0 & 1 \end{array} 
ight]$$



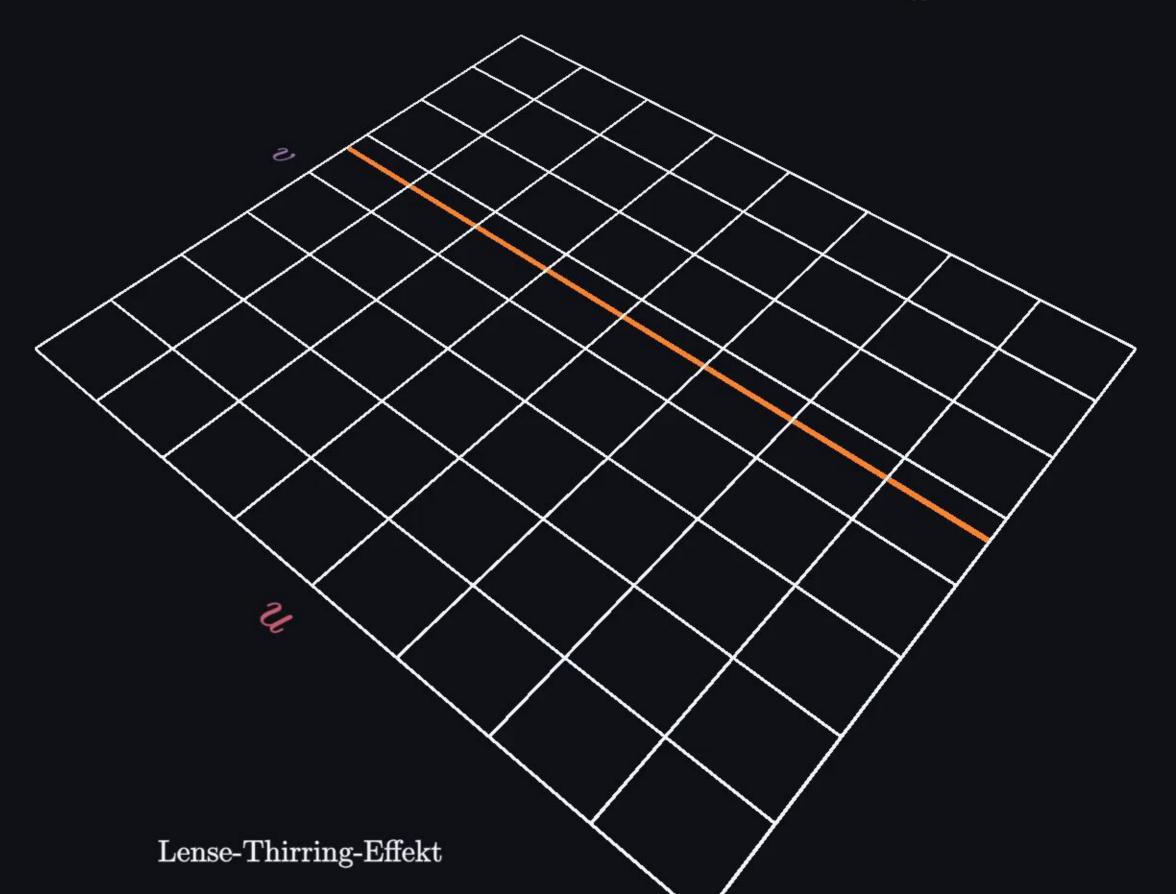


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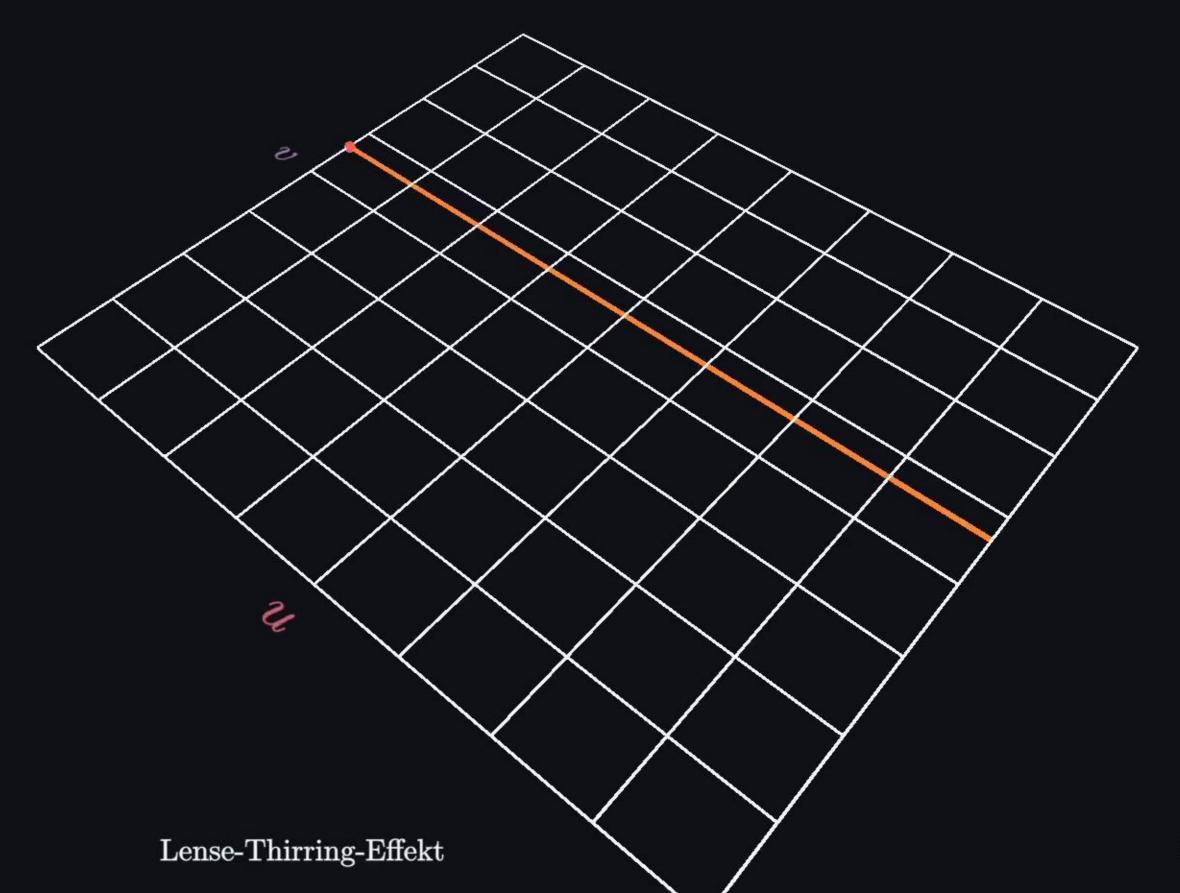


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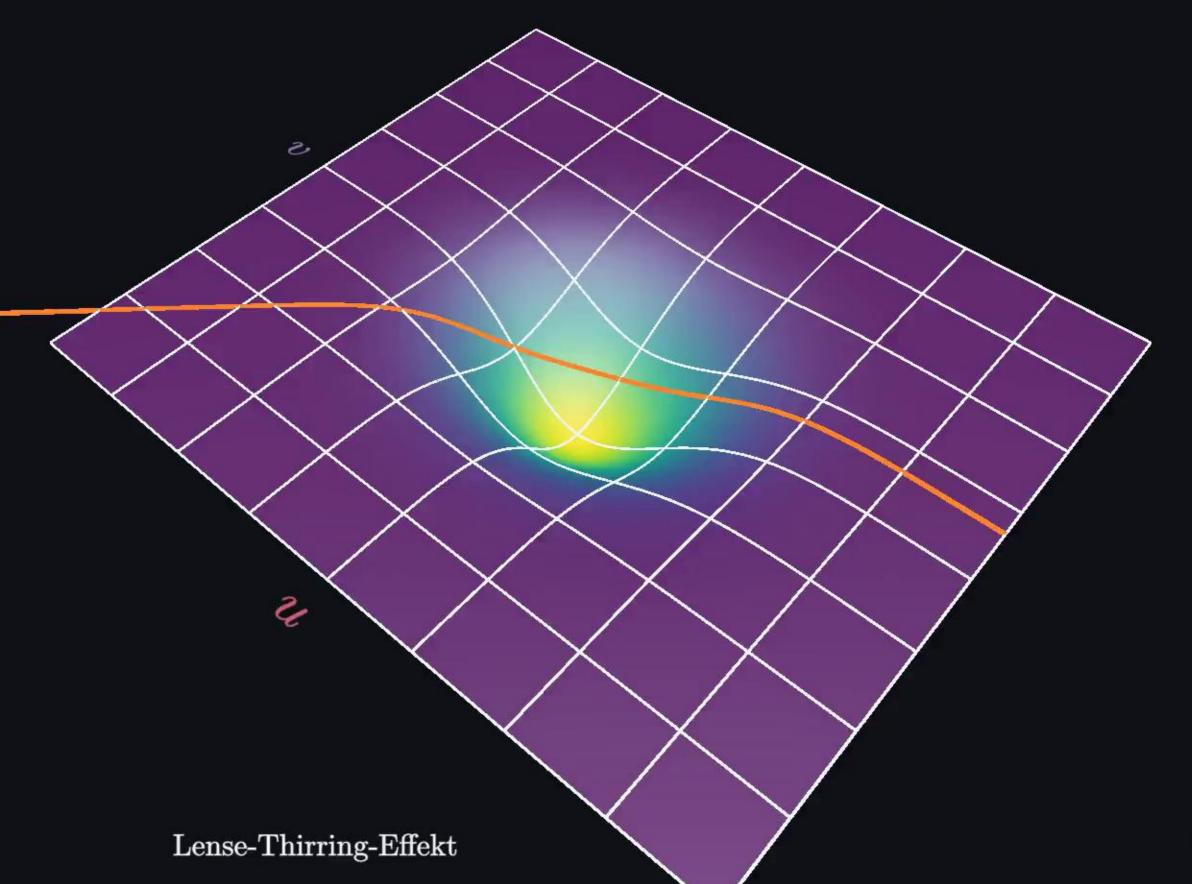


$$\vec{r}: \mathbb{R}^2 \to \mathbb{R}^3$$

$$oldsymbol{g} = \left[ egin{array}{ccc} 1.00 & 0.00 \\ 0.00 & 1.00 \end{array} 
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$$-\Gamma^{\lambda}_{\mu
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$$g_{\mu\nu} = \partial_{\mu}\vec{r} \cdot \partial_{\nu}\vec{r}$$



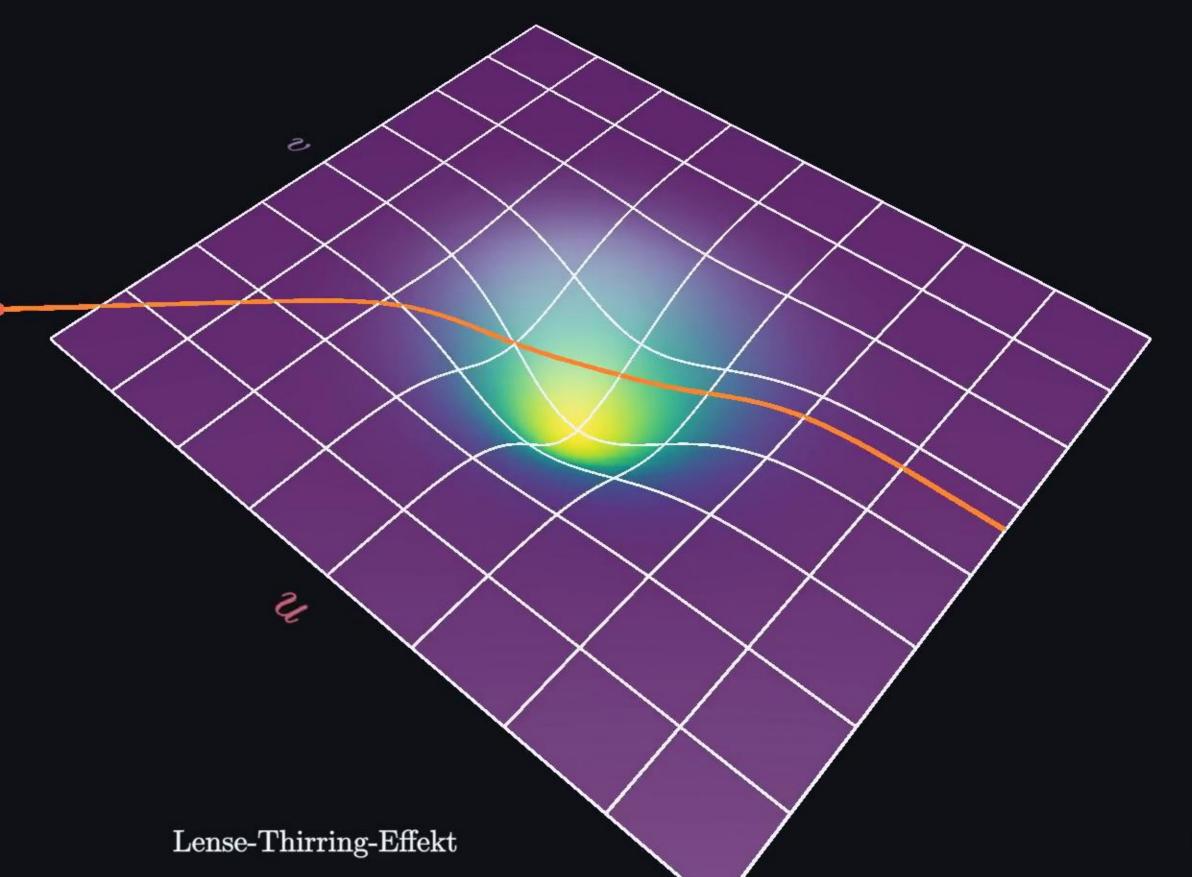


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## EM-Felder

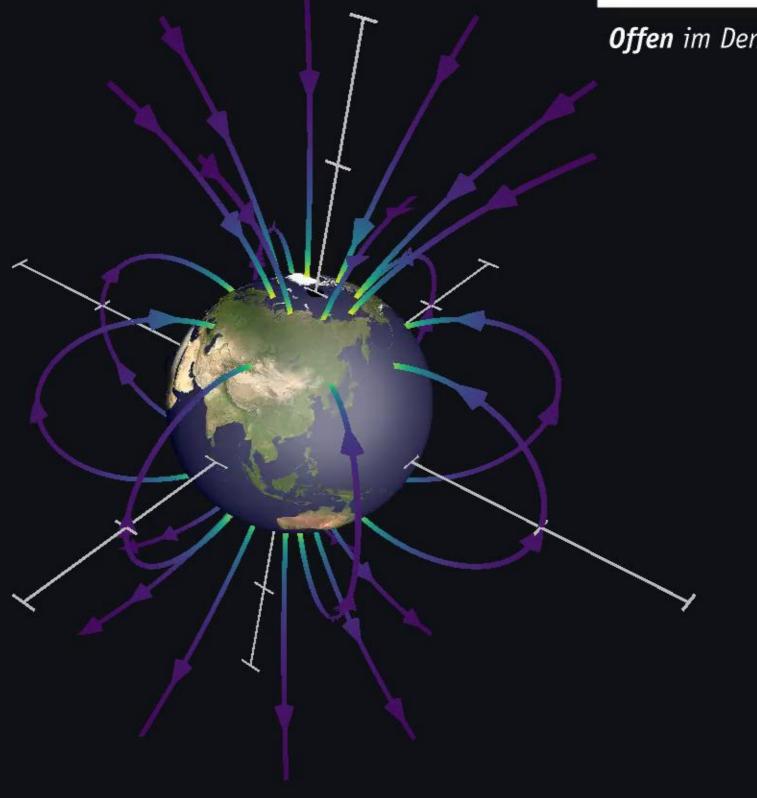
$$ec{B}=rac{1}{r^3}\left[ec{S}-rac{3(ec{S}\cdotec{r})}{r^2}ec{r}
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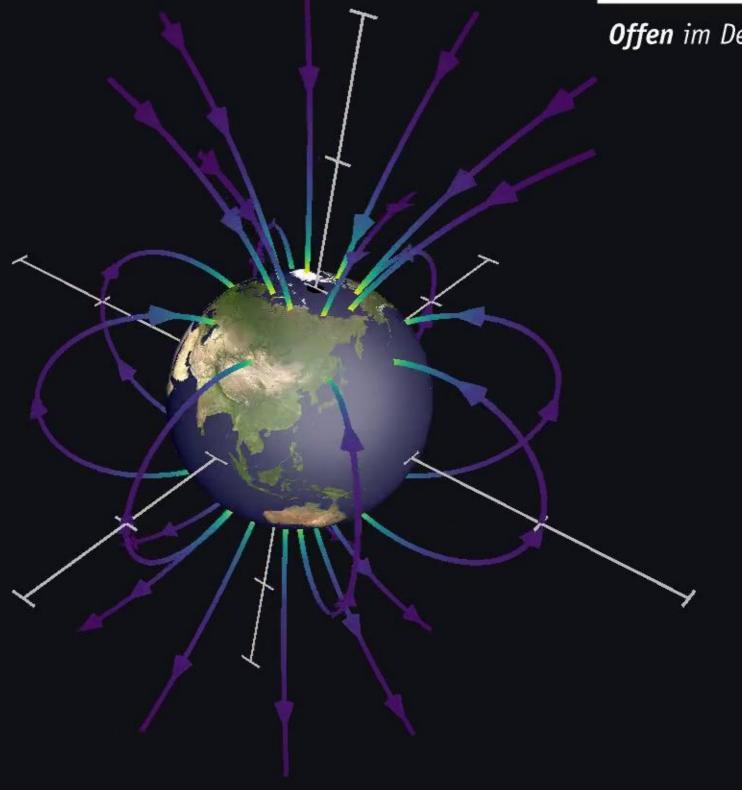




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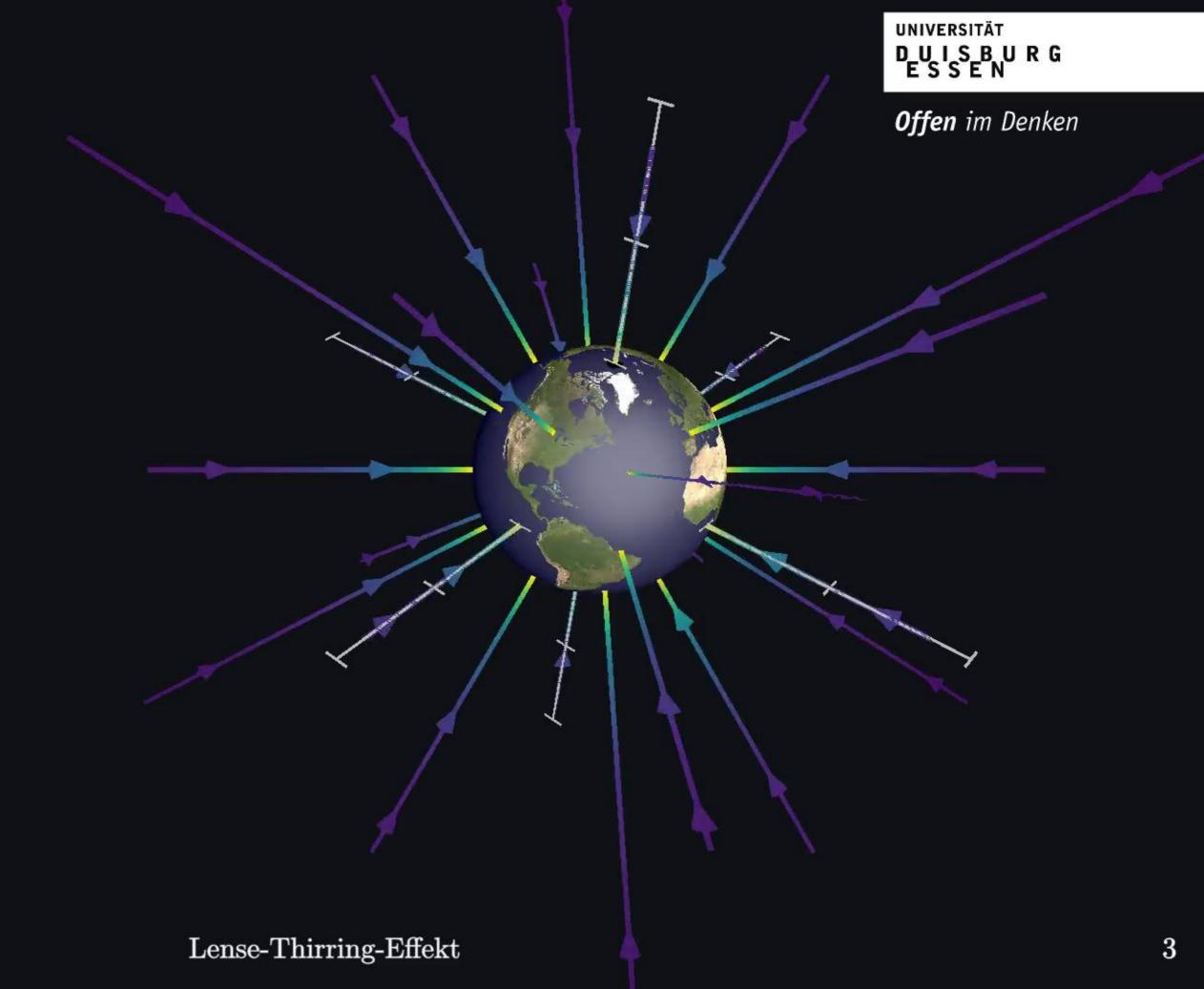




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# EM-Felder

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