

# SBB Inspiration Days – Die Zukunft beginnt heute.

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## Ziel der SBB Inspiration Days.

- Präsentation zukunftsweisender, aktueller SBB-Projekte und Themen.
- Inspiration durch Externe.
- Förderung des Dialogs, der Vernetzung und der interdisziplinärereren Zusammenarbeit.
- Wissensvermittlung, Anregung zu Innovationen.
- Stärkung der "OneSBB"-Kultur.

# Wettbewerb Inspiration Days - Die Zukunft beginnt heute















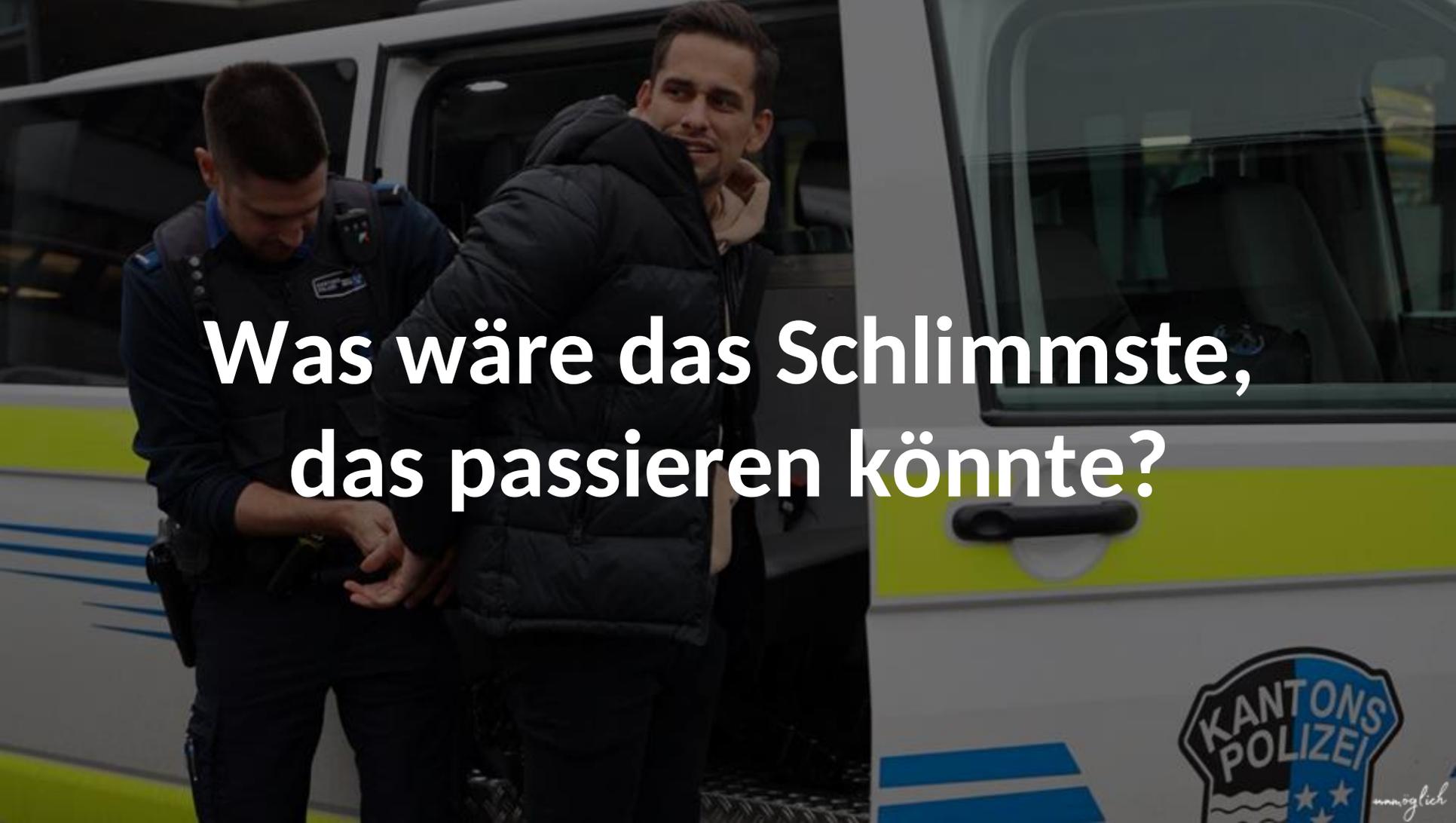




A man wearing a grey hoodie, shorts, a cap, and a backpack is captured in mid-air, jumping over a shallow stream. The background features rolling green hills under a cloudy sky. The text '3 Fragen' is overlaid in the center of the image.

# 3 Fragen





**Was wäre das Schlimmste,  
das passieren könnte?**



*unmöglich*



# Wie gross sind die Chancen, dass es eintreffen könnte?

**MATTER**  $\int d(uv) = uv = \int u dv + \int v du$

**WHY**  $D^{1/2} c = c \lim_{\lambda \rightarrow 0} \frac{\lambda^{-1/2} \Gamma(\lambda + 1)}{\Gamma(\lambda + \frac{1}{2})} = \frac{c}{\sqrt{\pi t}}$

**CHANCE**  $\Delta(Q) = \dots \begin{matrix} 0 & \frac{1}{16+2^2-4\delta} & 1 & \frac{1}{16+2^2-4\delta} \\ 0 & 0 & \frac{1}{2^2-4\delta} & 1 \\ 0 & 0 & 0 & \frac{1}{16+2^2-4\delta} \end{matrix} \dots$

**QUANTUM**  $\frac{d}{dt} \begin{bmatrix} \delta x \\ \delta y \end{bmatrix} = \begin{bmatrix} f_x(x_0, y_0) & f_y(x_0, y_0) \\ g_x(x_0, y_0) & g_y(x_0, y_0) \end{bmatrix} \begin{bmatrix} \delta x \\ \delta y \end{bmatrix}$

**LIVE**  $t = \int dt = \int \frac{dx}{\sqrt{2h + x^2 + \frac{1}{2}x^4}}$

**FIELDS**  $T = -2\sqrt{\frac{a}{g}} \int_1^0 \frac{du}{\sqrt{1-u^2}} = 2\sqrt{\frac{a}{g}} [\sin^{-1} u]_1^0 = \pi\sqrt{\frac{a}{g}}$

**PRESENT**  $\int_a^b p_j(x) W(x) dx = \sum_{i=1}^n w_i p_j(x_i)$

**HEAVEN!**

**PHILOSOPHY**  $(1-\epsilon)F(n) < f(n) < (1+\epsilon)F(n)$

**EVERYTHING WE DO**  $F(x, u, v, w, t) = x^6 + ux^4 + vx^3 + wx^2 + tx$

**IN MATH**  $\frac{df}{dx} = \frac{\partial f}{\partial y} y_x + \frac{\partial f}{\partial y_x} y_{xx} + \frac{\partial f}{\partial x}$

**IMPOSSIBLE TO ESCAPE**  $y = e^{2iz} {}_1F_1(\frac{1}{2} \mp \frac{1}{2} iA; 1; \mp 2iz)$

**REALIZED**  $\frac{\partial f}{\partial y} y_x = \frac{df}{dx} - \frac{\partial f}{\partial y_x} y_{xx} - \frac{\partial f}{\partial x}$

**LOVE**  $A = \int_a^b f(x) dx$

**THE MIND**  $t_{12} = \int_{F_1}^{F_2} \frac{dx}{\sqrt{2gy}}$

**HELL**  $\frac{\partial^2 u}{\partial t^2} - \nabla^2 u = f$

**FUTURE**  $\frac{\partial u}{\partial t}(0, t) = u_2$  on  $\partial\Omega$

**ALL LIFE**  $D^\mu f(t) = D^\mu [D^{-(\mu-\alpha)} f(t)]$

**ALL IS LOST**  $\int_{\gamma} f(z) dz = F(z(\beta)) - F(z(\alpha))$

**WHERE**  $\frac{\partial g^{jk}}{\partial x^m} = -g^{jk} \frac{\partial g_{ll}}{\partial x^m}$

**ALL IS FOUND**  $y_{n+1} - y_n = h \left( g_n + \frac{1}{2} \nabla g_{n-1} + \frac{5}{12} \nabla^2 g_{n-2} + \frac{3}{8} \nabla^3 g_{n-3} + \frac{251}{720} \nabla^4 g_{n-4} + \frac{95}{288} \nabla^5 g_{n-5} + \dots \right)$

**WHAT IS**  $\alpha = \beta^2 - 4\omega_0^2$

**IT**  $\begin{cases} u\omega(u) = 1 & \text{for } 1 \leq u \leq 2 \\ (u\omega(u))' = \omega(u-1) & \text{for } u > 2 \end{cases}$

**IS IT POSSIBLE**  $\ln \left[ \frac{W(x)}{W_0} \right] = -\int \mathcal{P}(x) dx$

**PLEASURE**  $\int_{\gamma} f(z) dz = 2\pi i \sum_{a \in A} \text{Res} f(z)$

**PEACE**  $z \mapsto \frac{i-z}{i+z}$

**WHO**  $F(x, y, u, v, w) = x^3/3 - x y^2 + w(x^2 + y^2) - u x - v y$

**DISCRETE**  $\nabla_{x_i} e_j = \sum_k \Gamma_{ij}^k e_k$

**TO DESCRIBE**  $\lim_{n \rightarrow \infty} f(x) = 0$

**STRINGS**  $K = \frac{\text{sech}^4(\frac{1}{2} \nu)}{8(\cos u - \cosh v)}$

**FEAR**  $t = \int \sqrt{\frac{1+(y')^2}{2g(y-\mu x)}} dx$

**DIE**  $d^2 s^2 = g_{11} (dx^1)^2 + g_{22} (dx^2)^2 + g_{33} (dx^3)^2$

**OUR EXISTENCE**  $e_1 \wedge e_2 \wedge e_3 \wedge e_4 \neq e_1 \wedge e_4 = e_2 \wedge e_3$

**ALL DEATH**  $SO(2) = \begin{bmatrix} 1 & 0 & 0 \\ 0 & \cos t & -\sin t \\ 0 & \sin t & \cos t \end{bmatrix}$

**USING ONLY**  $\int_{\gamma} f(z) \frac{g'(z)}{g(z)} dz = \sum_{\mu} f(\mu_n) - \sum_{\nu} f(\nu_n)$

$T = \sqrt{\frac{a}{g}} \int_{\theta_0}^{\theta} \frac{\sin(\frac{1}{2} \theta) d\theta}{\sqrt{\cos^2(\frac{1}{2} \theta_0) - \cos^2(\frac{1}{2} \theta)}}$

$D^{-s} f(x) = \int \dots \int_0^x f(x) dx \dots dx = \int_0^x \frac{f(t) (x-t)^{n-1}}{(n-1)!} dt$

*unmöglich*



**Was würde ich tun,  
wenn es eintrifft?**



