

# 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, running across a grassy field. In the foreground, a calm stream reflects the scene. The background shows a vast, open landscape under a cloudy sky.

# 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**  $\Delta(Q) = \dots$  **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!**

$\phi(x) = \sum_{j=0}^{\infty} a_j p_j(x)$   $\sum_{k=1}^n f(x_k^*) \Delta x_k$  **IN MATH**  $F(x, u, v, w, t) = x^6 + ux^4 + vx^3 + wx^2 + tx$   $(x - \alpha_1)(x - \alpha_2)y'' + \frac{1}{2}(2x - (\alpha_1 + \alpha_2))y' - (k^2x^2 - p^2x + q^2)y = 0$

$y^{(m)}y'^2 - 3y^{(m-1)}y''y' + 2(1-n^2)y^{(m-2)}y'^3 = 0$   $F(x, u) = x^3 + ux$   $\frac{df}{dx} = \frac{\partial f}{\partial y} y_x + \frac{\partial f}{\partial y_x} y_{xx} + \frac{\partial f}{\partial x}$  **IMPOSSIBLE TO ESCAPE**  $y = e^{2iz} {}_1F_1(\frac{1}{2} \mp \frac{1}{2}iA; 1; \mp 2iz)$

**EVERYTHING WE DO**  $S = \int_0^a \int_0^a \sqrt{c^2 + u^2} du dv = \frac{1}{2} \theta \left[ r\sqrt{c^2 + r^2} + c^2 \ln\left(\frac{r + \sqrt{c^2 + r^2}}{c}\right) \right]$  **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**  $t_{12} = \int_{F_1}^{F_2} \frac{dx}{\sqrt{2gy}}$   $\int_{F_1}^{F_2} \frac{dx}{\sqrt{2gy}}$  **HELL**  $\int_a^b f(x) dx = \int_0^{e^b} f(-\ln t) \frac{dt}{t}$  **FUTURE**  $\frac{\partial^2 u}{\partial x^2} - \tau^2 u = f$  **ALL LIFE**  $\frac{\partial^2 u}{\partial x^2} = -g^k \frac{\partial^2 u}{\partial x^k}$

$f(x, y) = y^4 + x^2 y$  **CONFESSION**  $\int_{\gamma} f(z) dz = F(z(\beta)) - F(z(\alpha))$  **BEING**  $\frac{\partial u}{\partial t}(0, t) = u_2$  on  $\partial\Omega$   $y_x \frac{\partial y}{\partial y} - y_x \frac{d}{dx} \left( \frac{\partial y}{\partial y_x} \right) = 0$  **WHERE**  $D^\mu f(t) = D^\mu [D^{-(\mu-\alpha)} f(t)]$

**ALL IS FOUND**  $y_{n+1} - y_n = h \left( q_n + \frac{1}{2} \nabla q_{n-1} + \frac{5}{12} \nabla^2 q_{n-2} + \frac{3}{8} \nabla^3 q_{n-3} + \frac{251}{720} \nabla^4 q_{n-4} + \frac{95}{288} \nabla^5 q_{n-5} + \dots \right)$  **WHAT IS**  $\alpha = \beta^2 - 4\omega_0^2$   $\begin{cases} u\omega(u) = 1 & \text{for } 1 \leq u \leq 2 \\ (u\omega(u))' = \omega(u-1) & \text{for } u > 2 \end{cases}$  **THE SOLUTION**

$\int_{-\pi/2}^{\pi/2} \cos^{\mu\nu-2} \theta e^{i\theta(\mu-\nu+2\delta)} d\theta = \frac{\pi^{\delta} (\mu + \nu - 1)}{2^{\mu\nu-2} \Gamma(\mu + \xi) \Gamma(\nu - \xi)}$  **IS IT POSSIBLE**  $\ln \left[ \frac{W(x)}{W_0} \right] = -\int P(x) dx$   $\int_0^4 \frac{\ln(x+1)}{x^2+1} dx$  **PEACE**  $\lim_{n \rightarrow \infty} f(x) = 0$

$\int \frac{\partial L}{\partial q} \frac{d(\delta q)}{dt} dt = \int \frac{\partial L}{\partial q} d(\delta q) = \left[ \frac{\partial L}{\partial q} \delta q \right]_a^b - \int_a^b \left( \frac{d}{dt} \frac{\partial L}{\partial q} dt \right) \delta q$  **STRINGS**  $K = \frac{\text{sech}^4(\frac{1}{2} \nu)}{8(\cos u - \cosh v)}$  **PLEASURE**  $\int_{\gamma} f(z) dz = 2\pi i \sum_{a \in A} \text{Res} f(z)$  **TO DESCRIBE**  $z \mapsto \frac{i-z}{i+z}$

**WHO**  $F(x, y, u, v, w) = x^3/3 - x y^2 + w(x^2 + y^2) - u x - v y$   $\int_{\gamma} f(z) \frac{g'(z)}{g(z)} dz = \sum_{\mu} f(\mu_n) - \sum_{\nu} f(\nu_n)$  **DISCRETE**  $\lim_{n \rightarrow \infty} f(x) = 0$

$SO(2) = \begin{bmatrix} 1 & 0 & 0 \\ 0 & \cos t & -\sin t \\ 0 & \sin t & \cos t \end{bmatrix}$  **DIE**  $d^2 s^2 = g_{11} (dx^1)^2 + g_{22} (dx^2)^2 + g_{33} (dx^3)^2$  **OUR EXISTENCE**  $t = \int \sqrt{\frac{1 + (y')^2}{2g(y - \mu x)}} dx$  **FEAR**

**ALL DEATH**  $\phi(x) = c_7 + c_0 + c_1 x^{-1} + c_2 x^{-2} + \dots$  **USING ONLY**  $T = \sqrt{\frac{a}{g}} \int_{\theta_0}^{\pi} \frac{\sin(\frac{1}{2} \theta) d\theta}{\sqrt{\cos^2(\frac{1}{2} \theta_0) - \cos^2(\frac{1}{2} \theta)}}$   $e_1 \wedge e_2 \wedge e_3 \wedge e_4 \neq e_1 \wedge e_4 = e_2 \wedge e_3$   $D^{-s} f(x) = \int \dots \int_0^x f(x) dx \dots dx = \int_0^x \frac{f(t)(x-t)^{n-1}}{(n-1)!} dt$  **unmöglich**





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



