Caro Professore,

Questa mattina è sollecitato [illegible] le [illegible]
di congratularmi per le brillanti [illegible] nel
Comune di Genova [illegible] Napoli. Ora che Ella è
[illegible] leggo a Napoli, [illegible]
[illegible] Del Re, [illegible]

Ad ogni modo, se non ho potuto [illegible] il
piacere di [illegible] compagnia all'Univ. di Napoli, sono lieto
che Ella [illegible] nella maggior misura possibile alla sua [illegible]
~~ed al suo caro [illegible]~~ ed in [illegible] città [illegible]
~~[illegible]~~ [illegible] la libera docenza [illegible]
~~e di raccomandare il mio [illegible] ai suoi [illegible]~~

Intanto non mancherò di [illegible]
della sua venuta, [illegible] Ella [illegible] non
vorrà certo privarmi di passare qualche giorno
a ~~[illegible]~~ a casa nostra, e [illegible]
glielo dico anche a nome di mia moglie, che
ha vivo desiderio di [illegible] la sua signora ed i bimbi, ai quali
manda [illegible] saluti [illegible]

(*) ~~[illegible]~~

Ora vedrà il prof. Gerbaldi, [illegible]
[illegible] per non aver potuto [illegible] in [illegible]
di tempo per [illegible]. Sono [illegible] occupato [illegible] e
ed [illegible], e [illegible] nella redazione
[illegible] di algebra [illegible] l'ultima [illegible]

$$\frac{dx_3}{ds} = \frac{R}{x_2}, \qquad \frac{dx_2}{ds} = -\frac{R}{x_3}$$

$$\frac{\delta}{x_0} + \frac{2}{x_2} = 0, \qquad x_1 = 0$$

$$\frac{dx_3}{ds} = \frac{R}{x_2}$$
$$\frac{dx_2}{ds} = \frac{2}{x_1} - \frac{R}{x_3}$$
$$\frac{dx_1}{ds} = -\frac{\delta}{x_0} - \frac{2}{x_2}$$
$$\frac{dx_0}{ds} = 1 - \frac{\delta}{x_1}$$

$$x_0 = 0, \quad x_1 = \delta$$

$$0 = \frac{2}{x_2} + \frac{\delta}{x_0}, \qquad x_1 = 0$$

Teoria [illegible]

Sp. osculat.
Sp. normale
Sp. [illegible]

Non

$$\begin{cases}\sum ba=0 \\ \sum bda=0 \\ \sum bd^2a=0\end{cases} \quad \begin{matrix}\sum ca=0 \\ \sum cda=0 \\ \sum cb=0\end{matrix} \quad \begin{matrix}\sum \lambda a=0 \\ \sum \lambda b=0 \\ \sum \lambda c=0\end{matrix}$$

$\lambda_i \equiv da_i$

$c_1 = Aa_1 + Bda_1 + Cd^2a_1$

$Aa + Bda + Cd^2a$

$A + C\sum ad^2a = 0$

$B\sum da^2 + C\sum dad^2a = 0$

$A\sum ad^2a + B\sum da + C\sum (d^2a)^2 = 0$

$b_1 =$

$\lambda_2 = Aa_2 + Bda_2 + Cd^2a_2$

$A + C\sum ad^2a = 0$

$C\sum Cd^2a = 0$

$1 = A^2 + B\sum da^2 + C\sum (d^2a)^2 +$

$+$

$c = Aa + Bda + Cd^2a$

C

$A + C\sum ad^2a = 0$

$B\sum da^2 + C\sum dad^2a = 0$

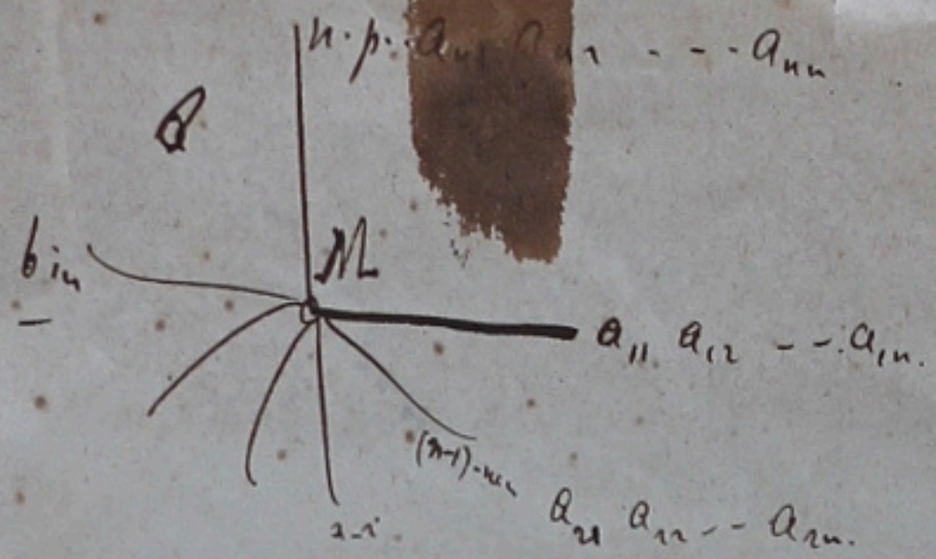
$C\sum bd^2a = 0$

$1 = C\sum cd^2a$

$b = Aa + Bda + Cd^2a$

$$\begin{cases} A + C\sum ad^2a = 0 \\ B\sum da^2 + C\sum dad^2a = 0 \\ A\sum ad^2a + B\sum dad^2a + C\sum (d^2a)^2 = 0\end{cases}$$

$\cdot = 0$



$n=4$

~~$a_{11}a_{11}+a_{22}$~~

$$\begin{cases} \sum a_{2i}a_{1i}=0 \\ \sum a_{2i}\,da_{1i}=0 \\ \vdots \\ \sum a_{2i}\,d^{n-2}a_{1i}=0 \end{cases} \quad \left| \begin{array}{l} \sum a_{2i}a_{1i}=0 \\ \vdots \\ \sum a_{2i}\,d^{n-2}a_{1i}=0 \\ \sum a_{2i}\,a_{2i}=0 \end{array} \right.$$

$$a_{21}=-\frac{1}{\varphi}\begin{vmatrix} a_{12} & a_{13} & \dots & a_{1n} \\ da_{12} & da_{13} & \dots & da_{1n} \\ \vdots & & & \\ d^{n-2}a_{12} & d^{n-2}a_{13} & \dots & d^{n-2}a_{1n} \end{vmatrix}$$

$$a_{31}=\frac{1}{\psi}\begin{vmatrix} a_{12} & a_{13} & \dots & a_{1n} \\ da_{12} & da_{13} & \dots & da_{1n} \\ d^{n-3}a_{12} & d^{n-3}a_{13} & \dots & d^{n-3}a_{1n} \\ a_{22} & a_{23} & \dots & a_{2n} \end{vmatrix}$$

$$\sum da^2=\varepsilon^2$$

$$\sum da\,d^2a=\varepsilon\,d\varepsilon$$

$$\sum a\,da=0$$

$$\sum a\,d^2a=-\varepsilon^2$$

$$A=C\varepsilon^2$$

$$B\varepsilon=-C\,d\varepsilon$$

$$\begin{cases} kA=k\varepsilon^3 \\ kB=-k\,d\varepsilon \\ kC=k\varepsilon \end{cases}$$

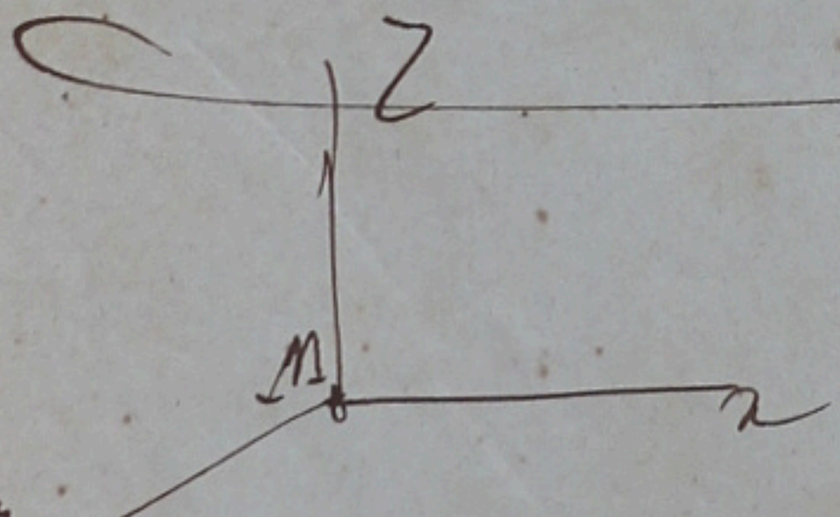
$$k\varphi=-k\,d\varepsilon$$

$$\sum l^2=1$$

$$\begin{cases} \sum la=0 \\ \sum l\,da=0 \end{cases} \quad \left| \begin{array}{l} \sum f_a=0 \\ \sum f_l=0 \end{array} \right.$$

$$B\varepsilon^2+C\,d\varepsilon=0$$

$$f=k\,da.$$



$$f=A\alpha+B\,da$$

$$A=0$$

$$l=A\alpha+B\,da+C\,d^2a$$

$$kl=\varepsilon^3\alpha+d\varepsilon\cdot da+\varepsilon\,d^2a\cdot\alpha$$

$$A+C\sum a\,d^2a=0$$

$$B\sum da^2+C\sum da\,d^2a=0$$

$$\sum l\,da=0$$

$$k\varepsilon\,\frac{1}{C}=A\sum a\,d^2a+B\sum da\,d^2a+C\sum (d^2a)^2$$

F. Mat.

1- Elasticità (vive lez. litogr. memorie Betti, Beltrami, Cerruti ecc.)
2- Elettricità ed ~~ottica~~ secondo Maxwell (Poincaré)
3- Elettrostatica- (Duhem, 1°)
4- Magnetismo- (" 2°)
5- Elettrodinamica- (" 3°)
9- ~~4~~ ~~6~~- Capillarità-
11- ~~6~~ ~~7~~- Teoria anal. del calore
8- ~~8~~ ~~8~~- Termodinamica-
7- ~~2~~ ~~9~~- Acustica-
10- ~~6~~ ~~10~~- Teoria matematica ~~della~~ luce-
6 ~~1~~- ~~11~~- Idrodinamica-

~~Capillarità~~
~~Termodin~~
~~Idrodina~~
~~Acustica~~
~~ottica~~
~~Teoria del cal~~

~~Ottica~~

11

11

mat 500

f...

Forme algebr.

$0 \quad f'_x \quad f'_y \quad f'_z$

f'_x

f'_y

f'_z

$\varepsilon \quad \eta$

$\rho = \frac{ds}{\varepsilon}$

0

$f(x,y,z)$

$\frac{\partial f}{\partial x} \quad \frac{\partial f}{\partial y}$

$\frac{\partial f}{\partial x}$

$$\begin{vmatrix} \frac{\partial^2 f}{\partial x^2} & \frac{\partial^2 f}{\partial x \partial y} & \frac{\partial f}{\partial x} \\ \frac{\partial^2 f}{\partial x \partial y} & \frac{\partial^2 f}{\partial y^2} & \frac{\partial f}{\partial y} \\ \frac{\partial f}{\partial x} & \frac{\partial f}{\partial y} & 0 \end{vmatrix} = H$$

$$H = \begin{vmatrix} \frac{\partial^2 f}{\partial x^2} & \frac{\partial^2 f}{\partial x \partial y} & k\frac{\partial f}{\partial x} - x\frac{\partial^2 f}{\partial x^2} - y\frac{\partial^2 f}{\partial x \partial y} \\ \frac{\partial^2 f}{\partial x \partial y} & \frac{\partial^2 f}{\partial y^2} & k\frac{\partial f}{\partial y} - x\frac{\partial^2 f}{\partial x \partial y} - y\frac{\partial^2 f}{\partial y^2} \\ k\frac{\partial f}{\partial x} & k\frac{\partial f}{\partial y} & -kx\frac{\partial f}{\partial x} - ky\frac{\partial f}{\partial y} \end{vmatrix}$$

$k\frac{\partial f}{\partial x} - x\frac{\partial^2 f}{\partial x^2} - y\frac{\partial^2 f}{\partial x \partial y}$

$-2kx\frac{\partial f}{\partial x} - 2ky\frac{\partial f}{\partial y} + x^2\frac{\partial^2 f}{\partial x^2} + 2xy\frac{\partial^2 f}{\partial x \partial y} + y^2\frac{\partial^2 f}{\partial y^2}$

$-2k\varphi + x\frac{\partial \varphi}{\partial x}$

$(1+k)\frac{\partial f}{\partial x} - \frac{\partial \varphi}{\partial x}$

16) 4.

β

$x\frac{\partial f}{\partial x} + y\frac{\partial f}{\partial y} = \varphi$

~~$\rho x_1 = ap$~~

$x_1 \quad x_2$

$\rho x_1 = ap$

$\rho x_2 = bq$

$\frac{x_1}{x_2} = \frac{a}{b}\frac{p}{q}$

$\frac{\partial \varphi}{\partial x} = \frac{\partial f}{\partial x} + x\frac{\partial^2 f}{\partial x^2}$

$\sum af = 0$

$\sum lf = 0$

$\sum f^2 = 1$

$\sum a\,df = -\sum f\,da = -\varepsilon \sum f^2 = -\varepsilon$

$\sum l\,df = -\sum f\,dl = -\eta$

$\sum f\,df = 0$

$df = -a\varepsilon - l\eta$

$ap_0 = bq_0$

$\frac{MA}{MB} : \frac{CA}{CB}$

$\frac{p}{q} : \frac{p_0}{q_0} = \frac{p}{q} : \frac{b}{a} = \frac{ap}{bq} = \frac{x_1}{x_1}$

Metti in conto

$x_2 = 0$

∞

$x_1 = 0$

1

0

$\varepsilon^2 = (b\,dc - c\,db)^2 + \dots$

$\varepsilon^2 = da^2 + db^2 + dc^2$