Uz 40 Spir (onseria i to Izhangeren Egravia As argued is paper 137 to famouseous field Jia us & to Prometia and to is Lampereou 1 = [ connedia The Jones egalia + Lmy 1 postulate. Allera Du SVEN It  $L_{\text{total}} = \left(\frac{4 \operatorname{diag}}{4 \operatorname{d}}\right) \left(\frac{1}{2 \operatorname{cm}_{\varphi}}\right) \left(\frac{1}{n} \cdot \mathbf{O}\right) + \sum_{i} \left(\frac{1}{n} \cdot$ opposition on contrast in allegation of the scalar privates of which is absolute the contrast of a contrast private of a contrast of a contrast of a contrast of a contrast of = du q 9 + Tun il langereno fidd

egration is défent from Out in le longereun. 1 field egration. Révépué le HFE is: dNFa=ja=A(0)(Rabnqb-09bNTb) and the IFE is:

2 - (1)

2 - (1)

2 - (1)

3 - (1)

(Rabanab - 20 b ATb)

- (8) lese Fa = d N A a + was N A b - (a) Magretic Monspole and Magreticity These plenmera are described by: dn F = j = (10) i. e Sy 2. B = cj° DXE + JD = j - (13) In de starters model j = 0 -(U) j = 0 - (14) ILECE, le existera of a magnific mople inter le existère d'a nigroic

" Current j. Kese are described by: R° 6 N 9. + a 6 NT - (15) compensate. For example, in species with a timesfeld teas. i.e. wab + KE bcg As show is previous work to existers of the mynesic current jumples Oct &. I. polarization of light is changed what grazes massive object. company to a Country by all point appoints this is defined by the internation of the destroyation Stall with matter, i.e. by the Coulans law and & Ampère Maxuell law: The state of the part of the p VXBQ-LJEGIMOJ mer minimized (section in the component with Cold Tember ) for the respectable writtly a twentyled six language quals and ayes olarization a. This nears that:

Spir (media of to Istomogenesso Egralia. Write de tetras pertulate as The = dug = + a mo 1 = Fa = ( de 8/2) HO + Wis. -11 g 11 1/2 factor c Define: here to the heart of the Hearthcal development, the practice receiver dock to stiend margor seathe nest send the EA Attended Sentential a are cost in the tempor protections in Eq. (48). F

Raha less: regress field legra Re spil connection in the informagness. The honogreen field egration of blu. t g, assistent the Al C | 1 for each shorthed photos and -1 for each objection. For including carries objection. For including carries - k) - R<sub>2</sub>, and heater  $\Delta k = (2k - k')$ . Such features The existence of the magnetic. Ch (current density ) and is defeatly to genery of eq. (12). Lecta Notatia In a sense of polarization and magnetization eq. (9) gives the same disconnection of the same in the same of the same in th (3) 95) displaced place place [28], or sky PD even and take elich is the Conton's law for VXB°--->E-MoJ Ilich is the Ampère Maxwell Eq. (11) gives: + 20 = of the section of the tree to bridge and the emitte lancinos

4) blick is the Faraday law with magnetic current in for each a Reproduction of eq. (16) is ECE was made sevent years ago. 1 experimentally show that eg. (16) describes observed change of polarization of light grazing a leasy mass. Magnic nompoles (charges) we described by eq. (15), and mentic currents by eq. (16).

activity nature entereduce being and a supply for all facility and the complex by eliminated. A gauge of the latter arrange profession in the profession and the profession and the complex of the comple

harventh (a) of the line (a). In series of parameter (a). One linds the following power course depondents (20).

$$\lim_{n \to \infty} \frac{1}{n} dn = \frac{1}{n} \lim_{n \to \infty} \frac{1}{n} dn = \frac{1}{n} \ln n^n - d(\log^n)$$

$$\lim_{n \to \infty} \frac{1}{n} dn = \frac{1}{n} \ln n^n + \frac{1}{n} \ln n^n - d(\log^n)$$

$$\lim_{n \to \infty} \frac{1}{n} dn = \frac{1}{n} \ln n^n + \frac{1}{n} \ln n^n - d(\log^n)$$
(21)

138(3) The Flav iz "The First Branch I dewity The "First Direch: I Rentity" of the standard model is, In the notation of differential sponetry this is: Rabhay = 0. - (2) Intersor notation this is: Rusp + Rpus + Rupu = 0. (2° b) and a one form (20) (see 6 (4) Tomb Rymp + Rphs + Rxph = 0. - (4) As should be well known by now, eg. (4 not an identity at all Re true identity was given Intersa notation, ea

As power is east paper 102 eq. (6) is to (yelic sum or & right faut side identically legral to As same cyclic sum of the definition of leach of the curature tensors. Cartar deiver are exact identity. It is not ever clear that Biarch deived eg. (4) and eg. (4) is not as identity The Riemannian Tossion is eq. (6) is: rece Turis to connection of the Riemann manifold. Eq. (6) follows from the fundamental commutator egistia: [ Ju, D.] VP = RP ojus V° - Tim Dx VP. Eq. (7) also follows from eq. (8). Writter out more
fully, eq. (8) is Therefore: Dy definition:

[ Du, Da] := -[ Da, Da] Note carefully ther and thest coince the estimate Fig. (41) are then equivalent Dylast frequency duplify affect degramminia medicija. Fot chrity, ji iji espellest tri states for the conversion process (although fundaging with either The Starder Model rupt Color and virasci. He have set in automaton see sublem The error is to standard mobel of catastrophic, and is lay. (13).

The error (13) works to way though the entire including of general relativity, to mayor egrations of which fail catastrophically. Notaslas 1) the standard egyptia listing the convertia to ) the standard egypatia listing it assume eq. (13): L" = 3 7 3 2 ( Ju 2 - 4 Ju) So we see dat textool dat we di, egation are unteliable. 2) The connection of the standard country is Ly = 3. Ly - (30) This is is correct for eg. (10). Eq. (19) is

true if and only if eq. (20) is true

3) The standard cosmology was:

The -? One - (21)

ord at the same time were in the cosmology was. ord at a same time west on - (23).

Resource to me to make the same to make the same to th Risis is correct from eq. (18). If the tousin is zero, so is the curvature.

-Ermo in A Socond Biruch. Thentil Re saad Birch lentiky of I started while is a gain is corned Secause of the omission of Nousion. In shall and notation the second Branch identity is: and is the notation of differential geometry it is: On Rab = 0. Eq. (2) may So exponder out es: dNRab+ wachRb-Racha as we wish to be record with planted organs, it is beginnessed to make DxRopus + Do DR photos of the second of the ( (arroll, eq. (3.87) of notes). Hovever, eg. (4 is Il case: RPopo As Carroll rention on page 81 of his notes, 11 Notice that for a general connection their works Se allitione terms indirectly torson tensor." In paper 88 & true socord Bianchi

2) identity was given. Proposition of the Dr 25.9 side of de Cartar dentity: DNT:= RNq. - (9) Note carefully that (comoll does not redize Γ λ = - Γ λ - (10) and dos not realize that steep is no symmetric port to the conservan. I'm consequence, chapters 4 onwards by Carroll are emiseous. However, it his chapters are to tree eq. (4) is the format: Dr. 6, - 0 - (11) Gus = Rus - 12 R gus - (12) ulese Rus = Ray, -(13) vlero: gra = 2 min - (14) The enneurs Enstein field equation is

sased a making eq. (11) poportional to the (overiant Noeller Thesen D^ Tm = 0. - (15) Dr. Gus = RD Tho le is Eister's constant. The field egrata is de particular solution: 5mm = 12 Jun. - (17) owever, eq. (17) assume eg. (5), vl. ( nears la Recépie de Eister field egation produces . The coner field egra ECE field egration, Jave

18(5). Proof of the Second Branch. Identity from the Standard Model Secarge it is assumed that: The first branch : lentity is: A MATERIAL AND STREET STATE OF THE STREET STAT This: DOR pur + DOR mp + DoR repu = 0. Similarly: RK pop + RK pop + RK opp = 0 - (4)

and D. RK pop + D. RK pop = 0 - (5) Thirdy: R Kpor + R Kpor + R Krop = 0 Durk post Durk 500 + Durk 200 = 0 - (7) Add (3), (5) and (7) DoRK pro + DoRK pop + DoRK poo + Do (RK mp + RK mp) + Da (Ringo + RK mp) + Du (R Kopa + RK 20p) = 0 -(8) Fixally add to Soft sile of eq. (8): DoR Kpm + DoR pop + Ju R poo

) to Kild: DOR pur + DoR por + DaR por = 0 which is the second Biarch identity, QED Eq. (9) was actually discovered by Ricci, and is true if and only if eggs. (1) and (3) early Hectarian, to bolis the states of the field it repo-The Conet I dentite This was first greensy Certain Duton + Doton + Duton := Ring + Rpin + R so the conest versin of eq. (a) is: 10 R gus + Da R pop + Da R poo := Do pt -+ Do Do Ton + Do Do T no In Rg(5. (10) and (11)

) BE (6): Proof of to Second Cartae I dentit The first Cartar Hentity is Sup + Spm + Supp Da (Spon + Spor + Sopp) = 0 -) (Sport Soport Sopo) = 0 - (5) Add egrs. (3) to (5): + Do (Sup + Saper) + Do (Supor + Saper) Add to Solf side of eq: (6) of sum Do Spur + Da Spor + Da Spor - (7) to ostain: 2 (De Spus + Du Spon + Du Spor) + Do (Sup + Supp + Spps) + Do (Supp + Supp + Sport)

+ Du (Sapa + Sarp + Sar) = Do San + Da Spon + Ju Spor De San + Da Sport Du Spar = 0 = DoRpar + DaRpor + DuRpar Sicce eq. (1) is an exal identity, IL differential for notation, lay. ( DN (DT a) := DN R = -- (11) ulex is Resame a etter side (11)

DN (DT°) := DN.R° - (12) The mishamed and is consent second branch identity" of of solete physics DoR Pro + DoR For + DaR K Eq. (13) is true if end only if: The correct egr. (13) is = Dork pm + Dork porn + Durpor Eq. (15) is to dentity out should have was in the Einstein field egration.

4) Also, Enter wer de irlament consentia (14). (13) le Northice d en over completed and neawisloss priceduse. Re nethod le used was DM 6 20 - (17 6 m = Rm - 1 R gm. - (18) where Ministerly Longer, schooling changed the energy free with ments authorities of how would Yes, diremind by \ A. Lamest (21), who simple The grantity to is from as the Eister Secanse eggs Sut it is rearized ess (14) are is consect. by a following steps. First lover idice, P.g.: Rrpus = graRpus - (21) grd = gar. - (23) ulso Secondly we notic comptishity, e.g.:

Do gud = 0 relast the standard attaches [265], and is diverged nest combounted [4] of the month your entropy synolik dye. confessors or jugoes: To parametrize the total energy from in open surremiting the conductors has two B. Negative Resister Presides of the Source Dipate The she term "Acres charge and "senter dipole" to sello and, we have the sello and, we have all printer to see them, but some the their enclaration of reserved vertual energy transferance of reserved vertual energy Do a my Partition, by the authority by tone is highlight. 3to no appointing of any absenced in again, against, after the recount littering constituted ally principlicated for small guest. As Lot also political ont there can known in particle protects dear the late 1950s. In sissainal abstrockymenter (Citids) the active viscous on in each tags our emissed alongsthes, ever though The heples synthesy of a dipole in its vaccine that declarge has your skippatif mass generator of espiratory mas limby characterists i.e. DuR = 3 pho de emergy than along the Emer direcovered by My at al. in 1957 [35]. As Let public in apmentity (2) in the recommuni-26) WE: profitigating escentilis are tablescape par core Fizally is eg. produces with the designed only to professe wering MR Petition the start among technical Cap per perions in a battery is used to pear. 7 to Contrast GENERATOR IS POWERED AL HOW THE EXTRINAL IL eq. (25) & following refuirions re week: Q E.O

Om Rph: = g g g h Dx Rpopes - (29) Dola: = googna Dolapus - (30) DR := - g g hh D Rohm - (31) Is S.P. Carroll states on p. 81, (chapters) his down to a sale notes, these defait on (29) to (31) are unique of and aly if the is correct eq. (14) is used. rein cer bid gel texatelità sobbje stropanium Juli This is much simpler and mallered cally ECE Cosmogy - It is saved a la Cartan identity: DNT9:- R [N9- (33) (artar Evan dentiky. DNF ... R " b N & - (33)

1) 138(7). The Jacobi Identity is Pierram Arotter funtamental error of the Scale physics is it is conset claim that the Jacobi identity gives The incoment "second Direch ; lentity". The Jacobi [[A,B],c]+[[c,A],B]+[[D,c],A]:=0 -(1) [A, B] = -[B, A] = AB-BA. -(2) Eq. (i) is true and is easily prover a follows: [(AB-BA), ]+[(CA-AC), B]+[(BC-CB), A] = (AB-BA)C-C(AB-BA) + (CA-AC)B-B(CA-AC) + (BC-CB) A - A (BC-CB) Therefore Thirty (1) to covariant deixatives
is definential Remains generally: ([p,[h,0]]+[D,[p,D]]+[D,,[o,,D])V This is consently claimed that ex. (4)

Marking out eq. (4) give: D., [D, D.]] \[ = D \( R \dots \, \tau \, \tau \, \tau \, \tau \, \tau \) - [D, D.] D \( \tau \, \tau \) \[ D, \tau \) - [D, D.] D \( \tau \, \tau \, \tau \) \[ D, \tau \) - [D, D.] D \( \tau \, \tau \, \tau \) \[ D, \tau \) - [D, D.] D \( \tau \, \tau \, \tau \, \tau \) \[ D, \tau \, \tau \, \tau \, \tau \, \tau \, \tau \) \[ D, \tau \, \t - On, [D., D] V" - D. (R" day V - Ting Dx V") - [O., D] On V"-(1) Non rate is together produced in the same This is the rule for to a Jin of the communitation of covariant leivatives on the abition terson X of any rank. In egs. (5) to (7) to grantities Dovo Do Vo and Da Vo, everyor by to commutators, we second rank Kewars E REXMODTE-RAM DXV Royand Davo - (9)
Royand Davo - (9)
Royand Davo - (10) [Da, Do] Duto = Roxpluto - R map Dx Vo - T 2 Dx V' - (11)

don + Un R dap then the many becomes (as + days). At the passes large, the tdbt) seem-thank as well as a smaller in (as + days) day for a reason in is ectivit's page for experience of more where a first as absent a place (APSAPA), the table designment in CHARGE & SECOND AUGUST AND AUGUST SHOW TO la la vice de Cantar, lew its: shows from speed where comparing the male their train, a (2) pier medi in on 3th speni So the photos transport two types of energy (1) a "week told) ries be regarded as ordinary against nontgy that has been compensed by the TAX and the sa increment of time-energy the The time-energy amagement (the) the farm of LAE(CAE). Hence the photon curries as becoment of spatial energy " Second Breach : lest . to ": pm + Dm R 2-pp =? 0 or phomes. Its sever receive ea - (14) Q E.D.

1) 138(8): Contradios in the Incorrect Second The is coned "second Direch ilentity" is: Dx Rpoper + DR Roxpor + Do Rxpho =? O This is the is consent basis of the is consent ties veril girls equal to the contract eq. (1) equality. The procedure adapted to to contract eq. (1) good my (Dx Rooms + D Rodm + Do Rapus)=?0 By netic compatisility:

guid Dx (goo Rpoper) + Op (goog and Rodger) Here, & wici symptic: etc. It is implify assured that the consention is also symmetric: The =? [ ] + ? o. - (5) Kbank = 3 - Kabar - (8) Rupo = ? Rpops. - (7) Rese als il come & symmetries. Re only

conet symmetry is: Rpope - - Rpoop. - (8) The iscorest symmetry (7) is used to define the Rup =? Rpr = g " Ruppo = 7 " Ruppo The Sasic error is eq. (5) works though (9) to eqs. (7) and (9). Freally the following contratia is male: geogral Rodin = ? - Jos Jul Rrom This contrantia again depends on the use of the izconect eq. (5). Eq. (10) is wither a: = - g mx Rx = - 7 3 mx Rx o m eq. (3) Secons De ilcoment: Onepa - Op R + Do Rpwill be in conent: Rpn = ? Rpp. - (13) Eq. (15) is witter as: D M 6 m = ? 0

in which the Einstein field tend is incorrectly - = Rm - 1 Rgms cardir give grip a rise (out the property straperty with relation Eisteiz Julier companied to enou nest just 360°. We may any that it spirit 300° in the ain that: On fine =? & DAT C. Blev the Banches Power, It Tremslaced Into Real Power leie The Transfer comment every menting lessity. Fixally claimed that i the personal is appeared that playered brown a many and appearance of the surpose of C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and surpose to the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. A. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. A. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. P. and C. Reversabeles, and the surpose of C. P. C. A.

For C. Reversabeles, and the surpose of C. P. C. A.

For C. Reversabeles, and the surpose of C. P.

For C. Reversabeles, and the surpose of C. P.

For C. Reversabeles, and the surpose of C. P.

For C. Reversa a nemissess eggalia. inches, Quoting Lat (Ref. 1, pp. 187-188): the content field legations are directly and simply on the Cartan as ilentities DNT:=RNQ DV L : = EV d in Ved

: Invariance of Dr Veda Field Conducte Transformation. The is denoted is general as is eq. of (amoll (love locatable notes): V= Vne(m) = Vn'e(m) - (i) fa example, considering a larentz bout in the e y Erd Z axis renor L same, so ve roeid & ve Ja field is 7'= (ct) e. + x i.  $\Lambda = \begin{bmatrix} \cos k \phi & -\sin k \phi \\ -\sin k \phi & \cosh \phi \end{bmatrix} - (5)$ The inserse Lorentz Lorst is A-1 defined  $\nabla V_{-1} = \begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix} - \begin{pmatrix} 0 \\ 0 \end{pmatrix}$ 

1-1= [ cost & sizt \$7-(7) 3) So: L SILL & CORP J The confinents of a transform as: [ct'] = [cosh & -sizh b] [ct] -(8) i.e.  $ct' = ct cosl \phi - x sinl \phi - (9)$   $x' = -ct sinl \phi + x cosl \phi - (10)$ The unit restors e (y) transform as: [e]=[colp silf][e]-(1) 20 = e. coslop + i sillop - (1) i = eo silp + i (oslo) Dot comprents and unit vectors transform covariantly according to eggs. (8) and (11). (Leck We have:

V = cte. + xi V'= ct'e 0 + x 1.i Eq. (5) is: V'= (ctcoslp-x52lp)(cosl peo+502lpi) + (x colp-ctsilf)(silfe. + colfi) = ct (col' \phi - sizh \phi) e. + > (col \phi - sizh \phi): - x sille colpe (0) + x sille colpe (0) - etsizløcolfi + etsizløcolfi. = ct e 0 + x i distribute with the all "gentlement," and proposeds with their mending foreshilds and possibles. The designer can hooly of the system at will, the controlly without any impa-The B Cyclic Theran is: et cyclicum lice B (3) = B(0) & (3) & -14 :- (19)

B (3) = B (0) e (3) et cyclicum (3) The basis revois e y defection. are Laentz covariant s Cyclic Theorem (17) is Latente loverian Q.E.D. The complex orchlar basis vertous test of the color of Q is not power by they Work, to shall the king 6 (2) 4, V - 2 11 - 6 (4 7 + 18) - 0 They are complex constrations of atesian unit rectais.

Notes 138 (10) : Astisymmetry of the Consection, Futler Details ! The fundamental theorem of Rieman gently is: [], D.] VP = (), PP. o - ). Pro + Pro Pro - Pox Pro) Vo  $\begin{pmatrix} \Gamma_{\lambda} & -\Gamma_{\lambda} \\ \Gamma_{\lambda} & -\Gamma_{\lambda} \end{pmatrix} D_{\lambda} V \begin{pmatrix} -\Gamma_{\lambda} \\ \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & -\Gamma_{\lambda} \\ \Gamma_{\lambda} & -\Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda} & \Gamma_{\lambda} \\ \Gamma_{\lambda} & \Gamma_{\lambda} \end{pmatrix} \begin{pmatrix} \Gamma_{\lambda}$ [Ju, D.] VP = 0. - (3) Too = Th = T22 = T33 = 0. ρο - JoPoo + ΓοχΓοο - ΓοχΓος = 0]. 1) Γρο - 2, Γρο + Γροχ Γρο - Γροχ Γρο - 0 - (6) 12 PP30 - 23 PP30 + PP3X P30 - PP3X P30 = 0) The only NOL - zero consentions are:

\[ \begin{align\*}
\Pi\_1 &= -\Pi\_2 & \Pi\_3 &= -\Pi\_3 Reidio i de Rienann tersor: RPoper: = du Plar - du Plar + Plan Par - Find Par m + ~ - (9) RPopo = - RPop. - (10)

The other symmetries are: T m = - T 2/4, Γλ = - Γλ, - (1) - ( do Tho - on Tho), - (13) The Fre - Por The = - (Por The - The Tree), - (14) [Po=- [ ] = - (15)  $\frac{1}{2} \sum_{n=1}^{\infty} \frac{1}{2} = - \left( \frac{1}{2} \right)$ The Error is the Trentied Centing Cornology This was to assume Rat It convention could be symmetric and Mr. - Zero. This is a glarity error Secarge it assume that there is a hor-zero symmetric committator. This assumption was used to wive the il coner layaria [ Du, D.] VP = ? ( Durpar - Durpar + This Tor +0 - LL V L V - (51) In this egratia their is no ordination of the Sugaration of the connection, whereas to convert ear (1) fixes the antisymmetry (12) though:

· [ D., D.] TP = - [2) The commutator [ Du, Doil and to consection Time Indicate this, and it emay us compared by assuring and 1 = ? = ( [ ] + [ ] + = [ ] + = [ ] ) 12 vl·cl: [ ] =? [ ] (S) - (24) and  $\Gamma_{\mu\nu}^{\lambda}(A) = -\Gamma_{\mu}^{\lambda}(A) - (25)$ The conest eq. (25) show that eq. (25) is the conest and informating. Scientific History
The Sasic error is so grainly: [D,,D]VP = ? [D,,D,]VP - (26) that som regented is realed into why it us made, and why it us reported for niety years.

38(11): Parallel Transport and Geodesirs ! The theory of parallel transport depend on the consertion and different convertion will give different crowers. The parallel transport eggation is, for a symmetric convertion: leve the cometion appears a printing a matrix pu (1, 10)

verter The amounts to girling a matrix pu (1, 10)

verter the amounts to girling a matrix pu (1, 10)

verter the amounts to girling a matrix pu (1, 10)

verter to sector at its initial value (7h (10)

to its value later in to pat: Vr(x) = Pm (x, x.) Vr(x.) - (2) Define to matrix:

An (1) = - [m dx - (3) Her: der (x, x.) = Am (x) Pr (x, x.) - (4) Schnebrye is egration for a time ordered operator la de same form as eq. (5). Its solution can Se expressed as a part ordered exporential Similar F. Dysa's solution: pro(1, 10) = Perp (-/2 dx dn) If the part is a loop, starting and ending at the same point, then pro(x, x, x, o) is a loventy trenform

a to tangent space at the point. The transforation is the holonomy of the loop. Knowing the Edmony of every possible loop is equalent to knowing the motion. If the constin is not symmetric, all of gertesic them is clarged. The targent vertor to a path sch (x) is

are I dh. Pavalled transport of the targent rector is  $\frac{D}{d\lambda} \left( \frac{dx^{n}}{d\lambda} \right) = 0 \qquad - (6)$  $\frac{d^2x''}{d\lambda^2} + \frac{\Gamma M}{\rho \sigma} \frac{dx'}{d\lambda} \frac{dx''}{d\lambda} = 0 - (7)$ The proper time is calculated using the delimition of a time-like part ( Carrolle notes, eq. (3.48)): The colculus of variation gives the statest d2x1 + 1 g po ( du g - + d - gom - do g - ) dx dx Eq (a) reduces to eq. (1) if and only

if the consection is symmetric. In other word if and als if: Ingerend, eq. (10) is not true, and is general, egs. (1) and (9) are not the same. Eq. (6) is le part that parallel transports it ova target vedar. Eq. (7) is the statest distance setween two points. When the cometia is not symmetre, these cacepts do not lead to the same result. Enstermed eg. (7) to derive the NewVonian limit ( Cample eq. (4.7) 1). So Eisteis theory depends on the assumption of a symmetric convertion. It is mus known last the convertia is antisymmetric, and can rever se symmetric. Einsteins nettra man to casiler & Newtonian limit as: doci << dt - (11) so eq. (7) reduces to:

don't + 100 (dt) = 0 - (12) Enster agai assure de remet symmetre Th. = = 2 gal (d.g, + d.g.x - dxg.) and at this point it may be carrived that Eister's procedure is meaningless. for the sake of completeress it is described as follows. He notice is expanded as a perturbation of the Mikuski mic nus Jun = 1, 1 km , 1 km ) << 1 Therwe: ghogno = So gho - 1 ho - 2 ho - (16) 100 = - = - = nm2 dx hoo - (17) This: For eq. (17) is eq. (13): d2x" = = = = = = = ( at ) 2 ( at ) 2

i.e. dt/dT is constant. The spacelike conjoients are given by:  $\frac{d^2x^i}{d\tau^2} = \frac{1}{2}\left(\frac{dt}{d\tau}\right)^2 \int_{i}^{\infty} \int_{0}^{\infty} -(31)$ 1. The incomed eq. (22) ained to Se the Newtonian Georg Sy to assitions assertia: Apply Chain play It is claimed is correctly lead us deived by Schwarzschild is for a notice solution of the Einstein field egration.

Eq. (10) is derived from the incorrect egration Γ h~ =? Γ ~ (25) and the assumption of notic conjection (Cample De 2 = - 6 2 m - 1 bu 2 2 - 1 bu 2 mx Dr gry = dr grp - Fin gxp - Fing grx = D- 3/2 = d- 8/2 - 1-1 8/2 - 1 -1 Sustrant egs. (28) and (29) from eq. 2 gm - 2 gr - 2 gm - Fpr gx - - Fpr gxx ナアルラットアルタのメナアックァルナアックメ It is now assumed is consectly that:  $\Gamma_{p}^{\lambda} = ? \Gamma_{p}^{\lambda} - (31)$ 

le nutre is symmetric, se it is stalk poor upe assesses one in budies ay compared to an experience of the profits the first of the profits of the profi in the spinors process. Print 100 ALAS state-dult all by the ALAS in a worm of papers published in the - O was com-/h~ her publishing peoply AND papers in the relationd Statemer, Other wood actioning a meetly expension directed by Dr. Myent W. Beans, a propherical with The Algor Presidency Institute for Administ Tools (ADAS) by a series 10: projection und so Lieu.<sup>20</sup> Big vacuum implantating by obsolodysamic. Decodes base, the vision of sacross explorating was glimping by emident some is found is al is a contest the rextsorts of or greenl relativity.