

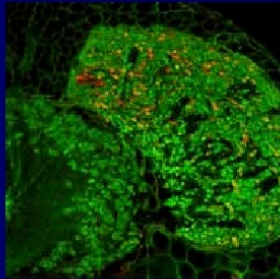


Ina Frambach (Autor)

Actin in identifizierten synaptischen Komplexen der Pilzkörper im Gehirn von *Gryllus bimaculatus* de Geer

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Komplexen der Pilzkörper im Gehirn
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3'Gkprgkwpi

Cevk'kv'gkp"guugpvkgmu'O qrgmÑif gu'E { vqungrgwu'xkgrgt "gwnct { qvkuiej gt\ gmgp." f cu'gkpg'y gugpvkfej g'Tqmg'kp"Y cej uwo u/'wvf "Dgy gi wpi ur tq| guugp"ur kgnOF keg'Rtq/ | guug'dcukgt gp'f cdgk'wvgt'cpf gtgo 'cwh'f gp'f { pco kuej gp'Gki gpuej chgp'xqp'Cevk0Uq" vkw'Cevk'kp'wvgtuej kgf rfej gp'Hqto gp'cwh'f kg'kpgkpcpf gt"ÑdghÑj tdct'ukpf <i nqdw@gu" *I /Cevk-'wvf 'Lrco gpv4gu'Cevk*"H/Cevk-0I nqdw@gu'Cevk'r qn{o gtkukgt'vdgk'Dkpf wpi " gkpgu'Cf gpqukp/Vtkr j qur j cv'P wengqkf u*"CVR+'wvf 'f guugp"J { f tqn{ug"| wCf gpqukp/F k/ r j qur j cv*"CF R+'| w'gkpgt'F qr r grj grkz.'y qf wtej "Lrco gpv4gu'Cevk"gpwvuj v0Y @ tgpf " H/Cevk'| (D0'kp'f gp'Uctmqo gtgp'f gt'nqpvtkmkp'Cr r ctcv'f gt'Ungrgwo wumwrcwt'ucdki' xqtngi v.'dguks/ gp'uq'i gpcppvg'f { pco kuej g'CevkLrco gpv'f kg'Gki gpuej chw'kj tg'N@pi g" f wtej "Rqn{o gtkucvkpp'wvf 'F gr qn{o gtkucvkpp'xgt@pf gtp"| w'nf4ppgp0F keg'Gki gpuej chgp" y gtf gp'hÑ'f kg'xgtuej kgf gpwvuj'Dgy gi wpi ur tq| guug'i gpwv v.' (D0'dgk'f gt'Gz vgpukpp'xqp" Rugwf qr qf kgp'ht'krgdgp'f gt'Co 3/dgp'qf gt'cwej 'dgko 'Mkgej gp'xqp'Hktdqncvugp'ko 'I g/ y gdg'xqp'Y ktdgmktgp"*U o qp u'wvf 'O KVEJ K UQP."3; ; 3-0

Ko 'P gtxgpi gy gdg'ur kgngp'f { pco kuej g'CevkLrco gpv'gkpg'y gugpvkfej g'Tqmg'dgk' Y cej uwo ur tq| guugp0Uq'y wtf g'H/Cevk'kp"j qj gp'Mqp| gpv'cvkppgp'kp'Y cej uwo ungi gp" xqp"gpwvuj gpf gp'P gtxgpi gmczqppp.'f qtv'dguqpf gt u'nqpl gpv'kgt'v'kp'Hkqr qf kgp.'pcej / i gy kgugp.'y qdgk'gu'cp'gkpg'o 'tkej wpi uxgt@pf gtdctgp'Y cej uwo 'dgv'kiki v'kv'*DTC| 'wvf " J QNNGP DGEM."3; ; ; +0

F ctÑdgt'j kpcwu'vugm'H/Cevk'ko 'P gtxgpi{ vgo "gkpg'y gugpvkfej gp'Dguv'cpf v'k'ki' kp'U{ pcr ugp/P cej d'ctuej chw'f ct"*F'G'ECO kNk'gv'cr0"4223-0Dgk'Y ktdgmktgp'y wtf gp'cm/ nwo wrcvkppgp'xqp'H/Cevk'p'Ñpf gp'kp'f gp'r quu{ pcr v'kuej gp'f gpf tkkuej gp'Ut wnw'tgp" xqp'P gtxgpi gmgp'pcej i gy kgugp"*HkMQXC'wvf 'F GNC|. "3; ; 4-0 CVWU'gv'cr0"3; ; 4-0J qj g" F lej vgp'v'gvgp'f cdgk'kp'f gp'F gpf tkgpur k/ gp'xqp'O qqh'cugtp.'M#4pgt| gmgp'wvf 'cpf g/ tgp'P gtxgpi gnm{ r gp'f gu'Egtgdgmnwo u'uqy kg'kp'P gwtqppgp'f gu'J kr r qeco r wu'cwh'*F K Q" wvf 'O W P CR K"4222-E CRCP K'gv'cr0"4223'c."d-0F keg'J ktp'tgi kqpgp'ukpf "dgk'Ngtp/'wvf " I gf @j v'kuxqti @pi gp'ur gl k'kuej 'kp'xq'k'kgt'v'Rquu{ pcr v'kuej 'cuuq| kgt'vgo 'H/Cevk'y ktf " j kgt'gkpg'Hwpmkq'kp'f gt'Xgt o kmwpi 'xqp'ut wnw'tgngt'wvf 'u{ pcr v'kuej gt'Rrcu'k k@| w i gur tqej gp"*O CVWU."3; ; ; ."4222-Nwq."4224-Nco RTGEJ v'wvf 'NGF QWZ."4226-0

Gkp'J cwr v'kpvgt'guug'f gt'Wpvgt'uej wpi gp'i cm'f gt'H'ci g'pcej 'f gt'Xgt'v'k'wpi 'wvf " O gpi g'f gu'O qrgmÑi'Cevk'kp'k'f gp'v'k' | kgt'v'P gwtqppgp'wvf 'kj tgp'ut wnw'tgmgp'wvf " hwpmkqpgmgp'Mqo r ct'ko gpv'p0Cevk'y ktf 'f cdgk' wo "gkpgp'ko o wpe{ v'qej go kuej .'| wo " cpf gtgp'o k'J k'hg'xqp'Rj cm'k'f kp.'gkpg'o 'Rk| v'qz'kp'f gu'Mpqmgp'dr@v'gtr k/ gu'f gv'gmkt'v' Ugkpg'Xgt'v'k'wpi 'y ktf 'cwh'| gnmw@go 'wvf 'uwl| gnmw@go 'P kxgcw'wvgt'Xgt'y gpf wpi 'f gt" nqphq'ngp'O kntqunqr kg'x'kuw'c'k'ukgt'v'wvf 'cpcn{ ukgt'v0

J kgt| w'y ctgp| wp@j w'f kg\ gmkf gpvkl kgtwpi 'w'f 'uqf cpp'f kg'ulej gtg'Gtmppwpi " f gt'Gkp/'w'f 'Cwui cpi uutwnwtgp"r t@'w'f 'r quw{ pcr vkuej gt'Grigo gpv'xqp"U{ pcr ugp+" pqw gpfi OHÃ'f kg'Cwuy cj n'xqp'P gv y gtmgkngp'y ct'xqp'Dgf gwwpi . 'f cuu'ulg'gkpgtugku' uutwnwtgm'cpf gtgtugku'hwpmkqpgm'xqp'j qj go 'cni go gkpg'kpgtguug'y ctgpOF ctÃdgt" j kpcwu'o wuugp'f kgug'Mqo r ctvko gpv'ko 'P gtxgpu{ ugo 'hÃ'f kg'cpi gy gpf gv'p'O gy q/ f gp'i w'i ggki p'v'ugkp.'uq'f cuu'f kg'CwvLpf wpi 'xqp'kf gpvkl kgtv'p'P gwtqpgp'w'f 'f kg'i wg" tqwkwgo @Eki g'Y kgf gtj qnwpi 'xqp'O ctnkgtwpi ugzt rtko gpv'p'o k'o qrgmwtctg'O ctnkgt" i gy @ trkugv'y ctOHÃ'f gtctvki g'Wpvtuwej wpi gp'ulpf 'plej v'cmg'P gwtqpgp'f r gp'kp'i rnk/ ej gt'Y kgug'i ggki p'v'Uq'ulpf 'kf gpvkl kgtv'p'P gwtqpg'kp'P gtxgpu{ ugo gp'xqp'kpgm'p" ó'f gLp'kgt'v'o kwgn'u' gnqr r gngt'grngtqr j { ulqmj kiej gt'w'f "o qtr j qm'j kiej gt'Ej ctcmtk/ ukgtwpi "ó'pwt'kp'Gkp/'qf gt'Y gpi | cj n'dgmppv0k' t'g'u{ pcr vkuej g'Mqppgmkk@'ku' y ct" i w'w'pvtuwej v.'f qej 'cwu'o gv qf kiej gp'I tÃpf gp'ku'qhw'gkpg'o qrgmwtctg'O ctnkgtwpi . " f kg'ulg'o k'l'j tgp'U{ pcr ugp'cwu'f gt'P gwtqr knwo i gdwpi 'j gtxqtj gdw.'plej v'o ¾ rkej OC wh/ n'4wpi ui tgp| gp'f gt'Nkej vo kntqunqr kg'uv'mgp'f ctÃdgt'j kpcwu'Cphqtf gtwpi gp'cp'f cu' w' w'pvtuwej gpf g'U{ ugo OF kg'u{ pcr vkuej gp'Utwntwgp.' (DOP gpf tkgp.'o Auugp'gkpg'j kp/ t'gkej gpf g'I t3Eg'j cdgp.'f co k'f kg'Cddkf wpi 'w'f 'Cpcn{ ug'xqp'O qrgmÃrktvgkwpi gp'cwh' rkej vo kntqunqr kiej go 'P kxgcw'o ¾ rkej 'knOCwej 'uqmg'f cu'P gv y gtnf gt'P gwtqpgp'o k' U{ pcr ugp'tgrv'k'gkphcej "qti cpkukt'v'ugkpOMgkpguhcmi'uqmg'j qej 'mqo r r'gzg'Xgtj @w/ pkuug'f w'ej 'Xgtpgv' wpi 'xkngt'P gwtqpgp'f r gp'cwh'mgkpg'o 'Tcwo 'xqtrk'gi gp'OGk'p'uqrej gu" P gwtqr knLpf gv'ulej 'ko 'kpgm'gpj ktp'f qtv.'y q'dgk'gkpgt'Tgf w'f cpl 'xqp'P gwtqpgp'gkpg" gkpguj d'ctg'I gqo g'v'kg'lj t'gt'Cpqt'f p'wpi 'i gi gdgp'ku'ó'f w'x'gti r'kej d'ct'o k'f gp'U'ctvc." nqmw p@gp'w'f 'i mqo gtw@gp'P gwtqr k'gp'f gt'Y k'dgm'kgtj ktp'gOF kgug'i gpcppv'p'Mtkgtk/ gp'gthÃngp'dgk'kpgm'p' (DOP gwtqr k'ctg'cng'kp'f gp'qr vkuej gp'Nqdg'p'o k'U'ej kiej v'whdcw" w'f 'f kg'Rk'j n'4r gt'Eqtr qtc'r gf w'pew'rc+'ko 'l' g'p'v'cng'p'J ktp'o k'i mqo gtw@go 'w'f " nqmw p@gp'CwhdcwOUqy qj n'f kg'Nqdk'qr v'ek'*O GÆGTVA J CI GP 'w'f 'UQTTC.'4223+'cni" cwej 'f kg'Eqtr qtc'r gf w'pew'rc+'*UEJ @TOCPP.'3; 92.'b93.'b94.'b95.'b96+'ulpf 'f kg'dkuj gt'co " dguv'p'w'pvtuwej v'p'J ktp'v'kg'OF gppqej 'ulpf 'xkng'o qtr j qm'j kiej g'F gv'knu'lj t'gt'o qrgm/ rctgp'Ur gl k'ckukgtwpi 'w'f 'Grigo gpv'u{ pcr vkuej gt'Xgt'nr r n'wpi 'plej v'wo hcuugp'f'dgmppv" d| y O'xgtu'v'p'f gp'0

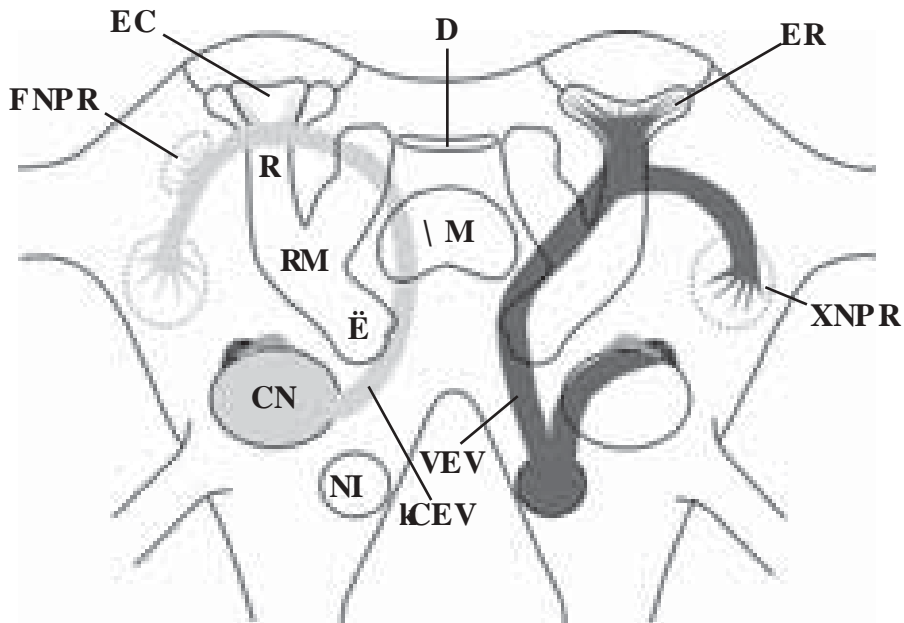
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Wpvtuwej wpi gp."kp'f gpgp'Rkñ nî4r gtctgcrng'rqncñi gmĀj n'qf gt'N@kqpgp'xqp'P gwtqpgp"
 kp'lj ppg'qf gt'kp'lj tgt'P cej dctuej ch'f wtej i ghĀj tv'y wtf gp."cwh'uqrej g'Hwpmkqpgp'f gt"
 Rkñ nî4r gt'j kp'*O GP\ GN'gv'cñ0'3; 96=GDGT.'3; 98=O K WP CO K'gv'cñ0'3; ; : +0N@kqpugzr g/
 tko gpv'ukpf 'l'gf qej 'tgrv'x'uej y kgtki 'l' w'kpvtg'v'gtgp."f c'cwej 'ko o gt'P lej v'Rkñ nî4/
 r gtpgwtqpg'dguej @ ki v'y gtf gp0F cuu'f kg'Rkñ nî4r gt'f gt'k'pugmgp'gkpgp'y gupv'kej gp'Vgkñ
 f gu'pgwtqpcngp'P gv y gtngu'f ctuvngp."f cu'Ngtp/'w'pf 'I gf @ej v'p'kur tq| guug'w'pvtuv'v'v'uq/
 y kg'xgtj cngputgrxcpv'kuv."dngi gp'cdgt'cwej 'cpf gt'g'zr gtko gpvng'\ wi @pi g'o k'p'kej v'
 kpxculxgp'O gy qf gp0Uq' gki gp'Rkñ nî4r gto wcpv'gp'kp'Ftquqrj krc'o k'tgf w' kgtv'p'qf gt"
 hgj r'p'f gp'Rkñ nî4r gtp'uqy kg'Mp'qem/Qw/O wcpv'gp."f gt'gp'I gpr tqf wmg'Hwpmkqpgp'kp"
 Rkñ nî4r gt/Uki p'crr tq| guugp'y cj tpgj o gp '*F C X K U.'4223=J GRUGP DGTI .'3; : 7.'J GRUGP DGTI "gv'
 cñ0'3; ; 7.'4225=F G' D G N N G'w'pf 'J GRUGP DGTI .'3; ; 6.'T Q O C P'w'pf 'F C X K U.'4223=O GP\ GN'w'pf "
 O @ N N G T.'4223.'Y C F F G N'w'pf 'S W R P.'4223+.'f cuu'V'kgtg'o k'xgt@p'f gt'v'p'Rkñ nî4r gtp'Gkp/
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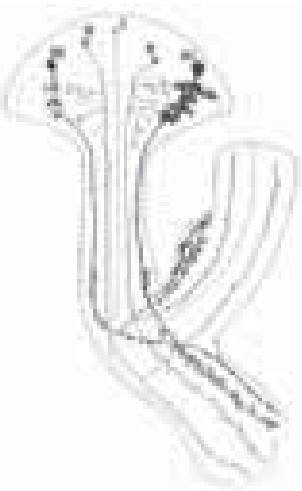
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 dgxqt| wi v'g'Qdlmg'f gt'Rkñ nî4r gthqtuej wpi.'.ugk'f wtej 'N@kqpugzr gtko gpv'f kg'Xgtj cñ
 v'p'utgrxcp| 'kj tgt'Rkñ nî4r gt'p'cej i gy kugp'y wtf g'*J W D G T'g'v'cñ0'3; ; : +0F kg'Rkñ nî4r gt"
 f gt'I tkng'ukpf 'r cctki g.'ur kgi grn{o o g'v'kuej 'kp'f gp'J go kur j @gp'f gu'Rtqvqegtgdtwo u"
 cpi grgi v'g'P gwtqr kg'*Cdd03C+0Ukg'gp'y cngp'i tw'pf u@| r'kej 'l' y gk'Mrcuugp'xqp'P gtxgp/
 | gmgp'<rqnerg.'kp'v'k'pukuej g'k'p'v'gt'p'gwtqpgp'*Mgp{qpl gmgp+'w'pf "gz'v'k'pukuej g'P gwtqpgp."
 f kg'f kg'Eqr qtc'r gf w'pew'v'c'o k'c'p'f gt'gp'J k'p'p'gwtqr k'gp'x'gtdk'p'f gp0K'g'Rkñ /@ p'kej g"
 Hqto "gtj cngp'uk'f wtej 'f kg't'gi gm @Eki g'C'p'q'f p'wpi 'f gt'Mgp{qpl gmgp.'ko 'Y gupv'k/
 ej gp'f wtej 'f kg'r c'tc'm'g'n'x'g't'r'w'h'p'f gp'Mgp{qpl g'nh'c'ugt'p'*Cdd03D+0Xqp'f gp'r g't'k'r j gt'kp"
 f gt'Uqo cuej lej v'k'gi g'p'f gp'\ gmñ4r gtp' k'g' gp'Cz'q'p'g'p'cej "x'g'p't'c'n'w'p'f "gp'w'g'p'f gp'| w
 p@ej u'v'F g'p'f tk'gp'kp'g'kp'P gwtqr km'qo r ct'w'o gpv.'f kg'Ecn{egu'*Mg'rej g+0F kgug'uvngp'f kg"
 J cw' v'k'pi cpi utgi k'p'f gu'Rkñ nî4r gtp'gwtqr ku'f ct0K 'I g'j k'p'f gt'I tkng'y g'ku'v'g'k'p'Ecn{z"
 g'k'p'gp'| y g'k'g'k'ki gp'C'w'h'c'w'c'w'h'uq'f cuu'f kg'ugt'kp'g'k'p'gp'x'q't'f gt'gp'w'pf 'j k'p'v'gt'gp'Mg'rej "
 d| y 0Ecn{z'c'p'v'gt'k'q't'w'pf 'r quv'gt'k'q't'w'p'v'gt'v'k'n'y k'f '*U E J @ T O C P P.'3; 95+0K 'y g'k'gt'gp.'p'cej "
 ht'q'p'v'q/x'g'p't'c'n'i g't'lej v'g'v'p'X'g't'r'w'h'd'k'f gp'f kg'r c'tc'm'g'n'c'pi g'q't'f p'g'v'p'Cz'q'p'g'f gp'| { r'k'p'f gt/
 h'4o ki gp'R'g'f w'pew'wu'*U'k'g'n+0C'p'ug'k'p'gt'D'cuku'x'gt| y g'ki gp'uk'ej 'f kg'v'q'f gt'{/h'4o ki gp"
 Mgp{qpl g'nh'c'ugt'p'w'pf "d'k'f gp'f gp'C'ir j c/'w'pf "D'g'w'c/N'q'd'w'u'c'w'u'0U'kg'uvngp'f kg'J cw' v'c'w/
 i cpi utgi k'p'f gt'Rkñ nî4r gt'f ct0K'f gp'Rkñ nî4r gtp'f gt'I tkng'Cej g'v'f go g'uk'ew'u'y wtf gp"
 cpj c'p'f "x'qp'I q'ri k'K r t@ p'k'gt'wpi gp'o k'p'f g'uv'g'u'f t'g'k'k'p'v'k'pukuej g'H'c'ugt'v'r gp'p'cej 'kj tgt"
 I g'uc'n'w'p'v'gt'uej k'f gp'*U E J @ T O C P P.'3; 95+0U'kg'uk'p'f "k'p'p'gt'j c'n'f gt'Rkñ nî4r gt'ur g' l'k'uej "
 cpi g'q't'f p'g'v'y q'd'g'k'Mgp{qpl gmgp'f gu'V{r u'K'w'p'f 'K'k'f gp'x'q't'f gt'gp'Mg'rej "uqy kg'f kg' g'p'v'c/
 r'g'U@w'g'f gu'U'k'g'u'w'p'f 'f gt'N'q'd'g'p'd'k'f gp0Mgp{qpl gmgp'f gu'V{r u'K'k'k'p'w'g'p'f gp'j k'pi gi gp"

kj tg'F gpf tkggp'lp'f gp'j kpvgtgp'Mgrej 'wvf 'wo i gdgp'f kg' l gpvtcrg'U@wrg'f gu'Ukgnu'o gf kcn' wvf 'rcvgtcr0K 'Crr j c/Nqdwu'ugki gp'V{r 'KKHcugt'p'wt'dku' wt'J @hwg'f gt'U@wrg'go r qt." y @ tgp'f 'ulg'ko "Dgvc/Nqdwu'cwh'f kg'o gf kcn'Ugkg'f gt'U@wrg' l kgj gp0F kg'Rkl n4r gt'f gt" I tkngp'ulpf "gkp'y cej ugpf gu'P gwtqr kn'Ectg'gv'cnf; ; 6.'3; ; 8.'4222=O CNCVGTG'gv'cnf" 4224+0K 'Rgtkgo o /pcj gp' \ gpvtwo "f gt'Rgtknet { gpuej lej v'dgkpf gv'ulej "gkp'Enwugt'xqp" P gwtqdrwvpp0Xqp'f kgugp'cwui gj gpf 'y gtf gp'ngdgpurcpi 'pgwg'Mgp { qpl gmgp'i gdlkf gv' FcdgkLpf gp'ulej "f kg'lApi uvgp'Mgp { qpl gmgp'ko \ gpvtwo "f gu'xqtf gtgp'Mgrej gu'wvf " xgtft@pi gp'f kg'@wrg'gp'P gwtqpg'lp'Tlej wpi "f gt'P gwtqr kn'gtk'j gtlg.'y qf wtej 'ulej "gkp" nqpl gpvtuej g' Cpqtf wpi "f gt'P gwtqpg'kppgtj cnd'f gu'xqtf gtgp'Mgrej gu'gti kd'0V{r 'K Mgp { qpl gmgp'y gtf gp'f go | whqri g'cni'wptgkg'Xqtuwhg'f gt'V{r 'KK gmgp'cpi gugj gp0F kg" Czqpg'f gt'lApi uvgp'i gdlkf gv'gp'P gwtqpg'xgtrwvhp'i gdApf gm'f wtej "f cu' \ gpvtwo "xqp"

C



D



Cdd'3<C<Uej go c" f gu' I tkngpj kpu<F kg" r tqvqegtgdtrgp" Rkl n4r gt" *Eqr qtc" r gf wpewrc." RM+ gtj cngp' Adgt' Rtq/ lgmkkppupgwtqpg" Kpr w' xqp" f gp" r tlo @gp" f gwqegtgdtrgp" P gwtqr kgg" *Cpvgppcndwu." CN' wvf " Nqdwu" i nqo gtwrcwu." NI +0'F gt" kppgtg' Cpvgppq/Egtgdtrg' Vtcm' *KCEV+ | kgj v'lp" f gp'xqtf gtgp'Mgrej "Ecn' z' cpvgtkqt." EC+ 'y @ tgp' f gt' Vtkq/ egtgdtrg' Vtcm' *VEV+lp' f gp'j kpvgtgp'Mgrej "Ecn' z' r quvgtkqt." ER+ r tqlk kgt0
 D<Ur gl k'uej g' Cpqtf wpi "f gt'f t'gk'Mgp { qpl gmv{r gp'K'KKwvf " KKlp'f gp'Rkl n4r gtp' *cwu'UEJ @TOCPP "gv'cnf" 4222+0
 ."Crr j c/Nqdwu." E." Dgvc/Nqdwu=" D." Rtqvqegtgdtrg' DtAeng=" FNPR'F qtqu/rcvgtcrgu'P gwtqr kn="R' Rgf wpewru=" XNPR'Xgp/ tq/rcvgtcrgu'P gwtqr kn=" M' \ gpvtcm'4r gt0

Ukgn'w'pf 'C' r j c/Nqdwu.'y @ tgp'f 'ukg'ko 'Dgvc/Nqdwu'gkpg'rcvgtcng'Rqukkqp'gkppgj o gp0' K o wpe{ vqej go kiej g'Wpvtuwej wpi gp'kf gpvkl| kgtv'p'I n'wco cv'cni'gkpgp'Vtcpuo kwgt/ n'epf kf cvgp'f gt'Mgp{ qpl gmgp'*UEJ @TO CPP 'gv'crl'4222+0

Gz v'lkpukiej g'Hcugtp'y gtf gp'xgtuej k'f gpgp'Mrcuugp'| wi gqtf pgv.'f kg'cni'Gkp/'w'pf " Cwui cpi uxgtdkpf wpi gp'f gt'Rkñ n'4r gtnqo r ctvko gpv'g| w'cpf gtgp'P gwtqr k'gp'qf gt'Rkñ / n'4r gtnqo r ctvko gpv'g'f k'gpgp'Uctm'c'wui gr t@ v'Gkpi @pi g'gtj cngp'f kg'Rkñ n'4r gt'xqp' f gwqegtgdtrcp' Rtqlgmkqpupgwtqpgp.'f kg'f kg'Rkñ n'4r gtn'grej g'Ädgt'o cuuk'g'Vtcmg." f gp'k'ppgtgp'C'p'v'ppq/Egtgdtrcp'*KEV+'w'pf 'f gp'Vtkqegtgdtrcp'Vtcm'*VEV+'gtt'glej gp' *Cdd03C+'*O QDDU.'3; : 4=J QO DGTI 'gv'crl'3; : : =UvQEMGT'gv'crl'3; ; 2.'3; ; 6=O CNWP 'gv' crl'3; ; 5+0Cni'Vtcpuo kwgt'xqp'f gwqegtgdtrcp' Rtqlgmkqpupgwtqpgp'y wtf g'Cegv' rej q/ n'p'k'p'cpf gtgp'k'pugmgpur gl k'gu'*Ftquqrj kv'o g'rcpqi c'wgt+'kf gpvkl| kgtv'*UEJ @TO CPP." 4222=I CUMCO C'gv'crl'4224+0Rj { ukqmi kiej g'Wpvtuwej wpi gp'y gkugp'gz v'lkpukiej g'P gw t'ppg'f wtey y gi 'cni'o w'wko qf cni'c'wui'*UEJ K'NFDGTI GT.'3; : 6+0

P gdgp'f k'ugp'Xgtdkpf wpi gp'xqo 'F gwqegtgdtrcp' 'y wtf gp'h'Ät'f kg'I t'kng'qr v'kuj g' Gkpi @pi g'k'p'f kg'Rkñ n'4r gt'c'whi gl gki v'*J QPGI I GT'w'pf "UEJ @TO CPP.'3; 97+0F ct'Ädgt'j k' pcwu'n'pvc'mkgtgp'I CDCgti g'P gwtqpg'f kg'M'grej t'gi k'qp'*UEJ @TO CPP.'3; : 9=UvTCODK'gv' crl'3; ; : +0F cdgk'j cpf gn'gu'ulej 'xgto w'wlej | w'gkpg'o 'i tq'Ägp'Vgkni'wo 'uq'i gpcppv'g'Hggf/ dcem'P gwtqpg.'f kg'k'p'qto c'v'k'p'gp'c'wui'f gp'N'qdgp'| w'Äenik'p'f kg'M'grej t'gi k'qp'Ädgt'o kwgp' uqngp'*DREMGT'gv'crl'3; : 7+0

Gkpl g'p'g'gz v'lkpukiej g'Hcugtv'r gp.'f kg'k'p'f gp'M'grej gp'| w's gp'r cuugp'o'w'pf 'gp'f / u'p'f ki gp'Dqww'pu'cpuej y gmgp.'ul'pf 'c'wui' qni k'K r t@ p'kgtwpi gp'dgn'c'ppv'*UEJ @TO CPP." 3; 95+0K t'r t@{ pcr v'kuj gt'Ej c'tcmgt'y wtf g'c'wui'n'p'x'gp'v'k'p'gmgp'g'rgmt'qpgpo knt'qunqr k' uej gp'Wpvtuwej wpi gp'c'di g'rgk'gv'*UEJ @TO CPP.'3; 96+0Dgk'f gt'I t'kng'g't'rcwdgp'x'qtr'k'gi gp/ f g'Wpvtuwej wpi gp'd'kuj gt'n'gk'p'g'C'wuuci g'Ädgt'f kg'O gpi g'w'pf "Xgt'v'k'wpi 'gz v'lkpukiej gt" Hcugtp'k'p'f gp'Rkñ n'4r gtp0

F kg'Eqr qtc'r gf w'pew'rc'f gt'I t'kngp'uqy kg'f gt'D'k'p'gp'ul'pf 'dg| Äi r'kej 'k'j t'gt'u{ pcr / v'kuj gp'Xgtuej c'w'wpi 'f kg'd'gu'w'pvtuwej v'p'k'pugmgpur gl k'gu.'y g'kni'p'gdgp'h'kej vo knt'qunqr k' uej gp'Dg'uej t'gk'd'wpi gp'c'wej 'f kg'I t'w'pf | Äi g'u{ pcr v'kuj gt'Xgtuej c'w'wpi 'g'rgmt'qpgpo knt'q unqr k'uej 'd'grgi v'y wtf gp'*UEJ @TO CPP.'3; 92.'b93.'b94.'b95.'b96+0F kg'G'rgmt'qpgpo knt'q unqr k'g'| gki v'u{ pcr v'kuj g'Qt'v'g'o k'j qj gt'C'w' ¾w'wpi .'y cu'h'kej vo knt'qunqr k'uej 'p'w'k'p'C'wui/ p'cjo g'h'c'ngp'o ¾ r'kej 'k'u'0F kg'd'gk'I t'kngp'w'pf 'D'k'p'gp'o qtr'j q'ni k'uej 'w'pf 'r'j { ukqmi kiej " d'grgi v'p'Uki p'cny gi g'y wtf gp'c'wej 'h'Ät'c'p'f gt'g'C't'v'p'Ädgt'p'qo o gp0

K'p'g'p'qy gp'f ki g'X'qtc'w'w'v' wpi | w'D'g'c'p'y q't'w'wpi 'f gt'H'ci g'p'cej 'f gt'Xgt'v'k'wpi " xqp'C'ev'k'p'P gwtqpgp'd| y 0'cp'U{ pcr u'gp'x'qp'gz v'lkpukiej gp'w'pf 'k'p'v'lkpukiej gp'Rkñ n'4/ r gtp'gwtqpgp'k'u'f kg'k'f gpv'kl| kgtwpi 'f gt'd'gk'f gp'P gwtqpgp'v'r gp'uqy kg'gk'p'g'f g'v'c'k'k'gt'v'g' C'p'c'n'ug'k'j t'gt'u{ pcr v'kuj gp'M'q'p'v'cmg'0Uq'y k'f 'k'p'gk'p'go 'g't'v'p'V'gkni'f k'ugt'C't'd'gk'f kg'Xgt/ v'k'wpi 'k'p'v'lkpukiej gt'w'pf 'gz v'lkpukiej gt'P gwtqpgp'w'pf 'k'j t'g'Xgt'p'g'v' wpi 'w'p'v'g't'g'k'p'c'p'f gt'o k'

J kng"xqp"gzr gtlo gpvmp\ gnhÅmwi gp"wpf"lo o wpe{ vqej go kiej gp'O gjv qf gp"uqy qj n' riej v"cnu"cwěj "grgmtqpgpo kntqunqr kiej "fcti guvgm"wpf "cpcn{ ukgtv'y gtf gp0F kg"gzr gtl/ o gpvmp/o qtr j qmī kiej "gtj qdggp"Dghwpg"gti @| gp"@wgtg"Dghwpg"kp"xkrgp"F gvcku" y gugpvkej 0Ukg"ukpf "fkg"pqw gpf ki g"Dcuku"hÅ" fkg"pcej hqni gpf g"Cpcn{ ug"fgt\ wglkwi " xqp"Cevk| w'hwpmkqpgm'xgtuej kgf gpgp"Vgkrgp"kf gpvL| kgtvt"P gwtqpg. "fkg"u{ pcr vkej " xgtdwpg gp"ukpf 0'

F kg"o qtr j qmī kiej gp"Tuwnvcv" gli gp"wpvgt"cpf gtgo "hÅ" fkg"Rkñ n¼r gt"gtuvo cnu." fkg"F qo kpcpl "ej go qugpuqtkej gt"Gkpi @i g"cwu'r tko @gp"P gwtqr krgp0CwEgtf go "y ktf " hÅ" fkg"l tkng" fkg"Uqo cvqvr kg"ej go qugpuqtkej gt"Gkpi @i g'r tko @gt"P gwtqr kg"kp" fcu" Ådgti gqtf pgv"Rkñ n¼r gtpgwtqr klpcej i gy kgugp0

F wtej "fkg"gzr gtlo gpvmp/o qtr j qmī kiej gp"Wpvgtuwej wpi gp'y ktf "dngi v. fcuu'kpu/ dguqpf gtg"Rtqlgmkpupgwtqpg"cwu'r tko @gp"ej go qugpuqtkej gp"P gwtqr krgp"kp"Vgkrgp" fgt"Ecn{ egu'o k'V{ r gp"xqp"kvtkpukiej gp"Mgp{ qpl gmgp"*V{ r "KKKp gwtqpgp+"u{ pcr vktgp" wpf "j kgt"u{ pcr vkej g'Mqo r ngzg"dkf gp0F kgug"u{ pcr vkej gp'Mqo r ngzg"gty kgug"ulej "hÅ" fkg"Cpcn{ ug"fgt"Cevkpxgtgkwi "cnu"co "dguvgp"i ggki pgv0

Gkp'y gugpvkej gu"Gti gdplu"fgt"Ctdgk'ku"fgt"pgwg"Dghwpg. "f cuu'H/Cevk"kp"fgp" Ecn{ egu"fgt qo kpcpv"fgp"Mgp{ qpl gmf gpf tkrgp" w' wuej tgdgp"kuv. "fkg"o k'ej qikpgti gp"gz| k' wvqtkej gp"Rtqlgmkpupgwtqpgp"xgtdwpg gp"ukpf 0'

4'O cvgtkcn'w'pf 'O gj qf gp

408'Xgt uwej ułgt g

F kg'Xgtuwej ułgtg'f gt'Ctv'I t{mw'dko cewrcwu'f g'I ggt'uvco o vgp'cwu'f gt'ncdqtgk/ i gpgp'\ vej v.'kp'f gt'f kg'Vłgtg'dgk'gkpgo "nqpuwcpvvp" y 3/4huv'pf ki gp"J gm/F wpngnTj { vj / o wu'i gj cnng'y wtf gp0Gu'y wtf gp'uqy qj n'0 @pprkej g'cnu'cwey "y gkdrkej g'Vłgtg'xgty gpf gv0 W0 "gkpg'Xgti rkej dctngk'f gt'Gti gdpluug'i gy @ trgkuvgp" w'h'4ppgp"wpf "cngtudgf kpi vg" F gi gpgtcvłqppg'f gu'P gtxgpu{ ugo u'o 3/4 rkej uv'cwu' wuej rkg'Ēgp."y wtf gp'pw'cf wmg'Vłgtg" ko 'Cngt'xqp'3/36"Vci gp'cwui gy @ n0HĀ'f kg'Wpvgtuwej wpi gp'y wtf gp'pw'@w'Ēgtrkej "kp/ wmg'Vłgtg'o k'wpdguej @ ki vgp'Ułppguqti cpgp'xgty gpf gv0Vłgtg'o k'rkej w0 kntqunqr kiej " gthcuudctgp'F gi gpgtcvłqppg'ko 'P gtxgpu{ ugo 'y wtf gp'xgty qthgp0Kui guco v'y wtf gp'ec0' 452'Vłgtg'hĀ'f kg'Nkej v'wpf '72'Vłgtg'hĀ'f kg'Grgmtqpgpo kntqunqr kg'r t@ ctłgt v0

404'Vt cegt vgej plngp

40408'Rt @ ct cvłqp 'hĀ' P gwt qpgp/Vt celpi

Xqt'f gt'Rt@ ct cvłqp'y wtf gp'f kg'Vłgtg'dku' w'Dgy gi wpi uwph@ ki ngk'ko 'Gku/ uej tcpm*/42'ĀE+n0ngdgvd0F kg'hguvi guvgemg'Mqr hnr ugr'y wtf g'htqpvcl' y kiej gp'f gp" Cwi gp'i g3/4hpgv'f cu'I gj ktp'htgki gngi v'wpf 'j gtcwur t@ ctłgt v0F kg'i guco vg'Rt@ ct cvłqp" gthqri v'gp'r j { ukqrqi kiej gt'Tłpi gtr'4wpi '*J .. TP GT.'3; ; ; +.'wo 'hĀ'gzr gtko gpvgng'P gwtq/ ppgpo ctngkt wpi gp'pgdgp'r cuukgt 'F khwukqp'cmkxgp'czqpcngp'Vt cpur qt v' w'i gy @ trgku/ vgp0'

F cu'j gtcwur t@ ctłgt v'I gj ktp'y wtf g'kp'gkpg'o k'Tłpi gt'i ghĀng'Rt@ ct cvłqpu/ uej crg'ĀdghĀj tv'wpf 'o k'Ucj no kpwłgp'o gej cpluej 'Łzłgt v0F kg'Tłpi gtr'4wpi 'y wtf g" cpuej rkg'Ēgp'f cdi gucw v.'uq'f cuu'f gt'gpvur tgej gpf g'J ktp/Cr r rkn'vłqpudgtgkej 'hĀ'f gp" Vtcegt'htgkci 0F kgugt'y wtf g'o k'Hkngr cr kgt'xqtulej vki "cdi gvtqenpgv0'

Ko 'Hqri gpf gp'y wtf g'f kg'Cr r rkn'vłqpuvngng'o k'gkpgt'ucwdgtgp'O kpwłg'nglej v' xgtrngv v.'wo 'f kg'Vtcegt'f wtej 'f kg'cwhi gtuugpg'J ktpj Āng'hqnrn'gkpl wdtłpi gp0F gz vtcp/ nt kucng' *u040404+y wtf gp'o k'gkpgt'y gkgt gp'O kpwłg'f kt gm'cwh'f kg'xgtrngv v'Uvgng'cwh/ i gtwci gp'dl y 0kp'f cu'I gy gdg'gkpi ghĀj t0W0 "gkp'Cwuy cuej gp'f gu'Vtcegtu'f wtej 'Tłpi gt " | w'wpvgtdłpf gp.'y wtf g'f gt'Cr r rkn'vłqpuqt v'uqf cpp'o k'Xcugrkg'cdi gf gem0Y @ t gpf 'f gt" Kpmxdcvłqp' *3.7'dku'5'j +y wtf g'f cu'i guco vg'I gj ktp'y kfg gt'o k'Tłpi gt'wo ur Āw'wpf 'f c/ pcej 'Łzłgt v' *u040504-0