

fl#n, y' nlfly' <yÁ' :yÂ <'flflflÿÛ, yÿ l >- fl#- "€">ÎÂ >- fl# "n, "ÿ-È'>y' ÿ- · fl#n, ÿ- >yÛ
ÿ>%o/ÿÿn>ÎÂ @Ø- - n€"->yÿN

æ, þfi' ɔ--fi'-->y' 0-fi, fi'0>y' ≥ >ɔ-fi'fi' >-fi, Ë>y' %o, ËËy' yËy' ,fi'>y'0 fi'fi'-->fi' y' /->ÿ' l
 "fi'0>y'-0Ë" fi'fi' "Ëy'0>y'< >Ë>y'Â yËy' >,fi'>y'Â %o-/fi'fi' l ,fi'--0Ë" -->fi, Ë--" ,Ë'fi'fi'fi'
 "ËË--Ë' l, -- <y'ËË>fi'fi' .fi'ËË--Ëy', -- y' fi'fi'fi'">y'0 Ë'Á>y'0 " --Ëy'÷--ÿËËy' Á--î fi'fi'-Ë'
 "fi'0>y'>fi'">y'0 0fi'fi'Á 0-y', fi'fi'fi' N

æfl'þ-,y'>Î' <þnflþyð,yð · ɔ-ʌl,y' „flnɛ:n<nÁ>>Î<y' flþ->-<y' “nð‘,Ë>n”n flþn;þ->,- l “y÷>yð
,þ->-flnþ,yÎÂ ·þ·,“ l €y-fn y>n”n ,þ->-flnþ,n”n ·nn-Ë>yð l “ ·€.,Á-’ “nð>y>n”yð
,þþnþy,yÁ/yÂ @,”þnð y€y@þ·,”yÂ @flþyÁy; l@n,flþÎ' @“€yðÓ, @->-@>nfl->-n;Î' @fl-...÷þþn”

ø€->fi"-Ø "fi-flÿ,-€ÿð-ÊÿØ ≥ **ð-†->** ·fi"€-·fi"->>-Ø "fi-flÿ,-€ÿð-ÊÿØ " ʌ,,€fi,,fiÁ>ÿÿ ·,-Êÿfi>-† ʌ
 'fi fl,/-ÓÈ-Ø "fið:fi÷,,Ó fiÁ†'>fi,ÿ ÿ fi,,È', "€ØÓÈ-Ø-Ø fi fi>-fi†-"€>ÿÓ €Á-È'"fi "†-Á-"€Ø
 fi†fiÂfi÷:>ÿØ /fi:fi€/>fi"fi fi-·€"fi"->ÿØ ʌ €Á>ÿØ ʌ "€ÓÁ-Ø Âÿ†,†"ÿÁ'·fi' ʌ fi†ÿ ·fi,fiØ>ÿØÂ ʌ>
 fi†'·,-"€ØÓÈÿÂ >fi fi-†'·,->,,Ó ,,†fið,, '€Ø ÷ÿð>ÿ Á'€fi"/- ʌ fi,†fiÁ/- " "fi fi€>ÿÿ /fi,fi†fiÁ
 > "€Á', ð-·fi-fiÿ "fið>ÿfi"fi>ÿØ >fi-†-ÿ,fiÁ fi fi-€'·,ÿÿ ÿ fi-€fi÷:>ÿÿ '€Ø fi†"->ÿð<-
 Á'€fi"/- 140

[illegible]

$\dot{\mathbf{r}} \cdot \dot{\mathbf{r}} = \dot{r}^2 + r^2 \dot{\theta}^2$ $\frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right) = \frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right)$ $\frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right) = \frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right)$ $\frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right) = \frac{d}{dt} \left(\frac{1}{2} m \dot{r}^2 + \frac{1}{2} m r^2 \dot{\theta}^2 \right)$

i, þ-Âñ“-Ô “Îñ€,- ≥ “›÷-Ô „«- l “Îñ€-Áÿ“-‘-Ô i, þ-Âñ“Èÿñκ Σ-; þ-Âñ“-»ñκ,
 €ÿÊ„ 0≤Îñ‘ñ‘ññþÿñ-þ’,-, €Ó ñþÿ ›-„ñ€›ÿÿ : þ-Âñ“ñ“ñ €„Á-Ô i, þ-Âñ“Î “Îñ€-Î
 ñ„È’,-€ÓÓ„Ô ›ð-“ÿ-ÿñ ñ, “Â “ÿñ“ ññ-ñ-ÿÿ ñ’-ÿÿ ÿ “Îñ€-, l ññ€„Á-’¿Â ññ
 “ñ„-‘,-›ñκ„ ñÊÿ-€Î›ñκ„ : þ-Âñ“-›ÿÓ ÿ ñÊÿ-€Î›ñκ„ ñ-’-ñ‘Á›ÿÓ l þ„ñ“Î ÿ ÿ¿
 ñ“€-È›ÿÓ l ‘ñ“ññþ-κ : þ-Âñ“-›ÿÓ l ð-€ÓÁ››Î “þ„ÿÿ i, þ-Âñ“Èÿ-ÿ l ÿ „«
 “ñ¿È›ÿÓ “þ“- ññ“ÿ“ÿ„ ÓÈ¿„ ð-ññ’,-, €Î„ „ ÿñ-ÿÿñÿ “þ-Èÿÿ N

i, t-Äfn"-Ô flt'yô ¥ fl€,-, d-, t-Äfn"->y' l /n, flt, Ó i, t-Äfn"-,'eİ n-Ôd->, fl€,-, y, İ i, t-Äfn"Ey/, " flnftÔ' öÿ:tflv l @,:->n"€>>İ @¥fn"nftn< @, t-Äfn"->yô N

i, þ-Äñ“-Ö „«- ¥ ññþ“€»-Ö “ ¥ññ“ñþ , þ-Äñ“-yö “’÷-Ö „«- l “ ñþ“€-Ä ññññÿ
 i, þ-Äñ“Eý ññ-Öð„.Öññññýð“,y ñ, þ-Äñ“Ö “ñññ-„ ñññýð-„ññ“yý ñ, þ-Äñ“ññ ññ-€„Ä-Ö

i.†-Âñ“ñŸ ‡ÿ/ ¥ fl†“flñ€-”-‘ñ’ ·ñ-î,ÿ l >- ·€,,Á-ÿ >-,,fl€‘ÿÿÔ ñ,ñ†ñ”ñ †-€/ÓÁ-‘,Ô ¥ñ”ñ“ñ†
 ·,†-Âñ“-ÿÿÔ ||

i,ʃ-Âñ“ñÿ ·€„Á-Ÿ¥ ·ñ“ʃËÿË”·Ô ·ñ-Î,y’ l flʃ“,„<ñ,ʃ’>ñ’ ¥ñ“ññññ< ·,ʃ-Âñ“->yÖ l · >-„fl€’y’<
ñ,ññññññ ð“ñð>ÿ-’, ðñ-Ôð->ñ,i Î,i,ʃ-Âñ“Ëÿ- ðñ·,È’:“ÿ,i Î,i,ʃ-Âñ“·Ó ð“fl€-,„ N

i, ʃ-Âñ“ñÿ , -ʃÿ%œ ·, -/- ·, ʃ-Âñ“ñÿ ñʃʹÿÿ · ʹÿÿÊÎ ·, ʃ-Âñ“ñÿ ·, <Î · „Á, ñ< ñ-Í/- ·, ʃ-Âñ“->ÿÔ
 ÿÎÂ-ʃ-/-ʃ- ·, ʃ-Âñ“ññ ñʃÿ/- ñññœñ“ññ, ·, ʃ-Âñ“->ÿÔ Ñ

-'€'->'fi' fi'fi'f'÷'>ÿ' 0,f-'">- ≥ >-f,Ê>ÿ' ,f,/,,f↑ ÷ÿ"ÎÂ /->ÿ' ÿ ->-,fi<yÁ',fiÿ' Ê'€fi.,fi.,ÿ
fi'f'>->'fi' · f-...fifiÿ',fi< yÂ %o,,ËÿÿÿL fi-,·€fi'€">fi' "fiØ'ÿ';'ÿ< f-ØÿyÁ'ÎÂ %-/,fi'fif"

fi-ŋ, ÷-ŌÈY ÷-ŋ l ÷-fi-ŋ, ÷-ŋlŋ “Y”, “yŌŋy yŋy “Y”, “yŌŋy ÷-ŋ, lŋŋ €yŋl <-Èy> y
fi-fi-ŋ, “fi-ŋyŌŋ

-„,þý,ýŸ flþfi‘, / . / fi fl€ / „€„ flfi fiþ”-ýð-ÊŸŸ ōfi‘ð‘ý l “, fi ÁŸ-€‘ flþfi‘ð- l flþfi-ý”-ýÔ l
 flfi €„ÁŸýÔ “ýÔ l flfi ‘È‘ýÔ l / „,þýŸ l / þfi flþýÔ,ýŸ ý þ„,ýÂ . fi „,„ÓËŸÂ „€„ l “Ôð-»ÎÂ .
 . fi “ÊË‘ý‘ ōfi‘ð‘ý ý Ô“ÊÔÓËŸÂ.Ô ” . fi,-“fiŸ Á-,ÎÔ l flþ“fi,-“ÊÔ‘ÎÂ »- fi . fi-“ýŸ
 ‘fi”fi“fiþ- . „,þý,ýÂ‘ fiŸ l , þ-»-fi fiþ, fiŸ ý ý fiŸ fiþ”-ýð-ÊŸŸ N -„,þý,ýŸ flþfi‘, / fi-‘,
 “ÆÓÁ-,î “: “ÎË‘fi þ‘ÁŸ-€‘»Î“ „€„ý ýËý fi fi fi Á-,î ýð ýÂ N v-€„ý flfi fiþ”-ýð-ÊŸŸ
 ōfi‘ð‘ý fi”„ -Î,î flþfiþ-þ‘,Î /- / „ fi“fi flfi,-“ËŸ- l,- / ý „,‘ fi fiŸÂ l flþý „€fi“ýŸ l Á, fi
 “: @,ý @„€„ý @Ô“ÊÔÓ,Ô@fi,fi‘€fiŸ @Á-,ÎÔ @fi fiŸ @ōfi‘ð‘ý N

[illegible]

-, þfi fl' þ-, fi þ . ., -l/, fl þ "fl þ y' y' <, 'ei / n y "ô, 'ei / n. y l fi, 'e', "éôôëy y >- fi. n " -> y y €yê' > ôy y
þ-ô þ- -fi, y fl þfi "y' > y' ., þy, / n fi fl þfi, /, - l þ- .. Äy, -> n fi >- < -.. n "î y y y' y' y', -€l: î y
fl fi, þ- y, 'ei / y y 0. fl þfi. 0-0, -/÷ "fi "þ- '€yô-êyô 0, þ- ", < 0y0, þy, < n

[illegible]

v·€ñ“yō ,;#-Âñ“-→yō ¥ ·ñ·Êÿ-€îî' fl#-“ÿ€- ,;#-Âñ“-→yō l ·ñ·,-“€”>î' >- ·ñ·ñ“ ø#-“ÿ€
 /ñ·ñl€÷·ñ“ñ ·;#-Âñ“-→yō fl„,Ê‘;„,ÓËyÂ H#-/-Êÿō 3) ñ, 20.07.2025 ”ñ H“-€” ≥ ø#-“ÿ€-l
 fl#ÿ·ÿ·î' /ñ·#·,ñ<„, ÿfl„ H“ÿ„ l ¥ñ“ñ“ñ#ñ“ ·;#-Âñ“-→yō H·;#-Âñ“ÎÂ flñÿ·ñ“ lL ”·>„
 flñ,ñ·-ÿ·,€ÿ ·;#-Âñ“ÎÂ „,€„ l fl#ñ“ñ-<< ·;#-Âñ“-→yō l ÿ ,ññ ÿ ñ,ñ·÷-ÓËÿ ñ·ñ“>î' „,€ñ“yō
 ø#-“ÿ€ ñ·ñl€÷·ñ“ñ ·;#-Âñ“-→yō fl„,Ê‘;„,ÓËyÂ @H#-/-Êÿō @Sî@ñ, @RPNPWNRPJ@”ñ

[illegible]

$\hat{O}^{\vee}, \sharp \gg -\hat{O}$,fi<-,fi€fi”yô ≥ €Á’y’ ô,,-fi“ · fi-’ô-fi€y“->y’< fl‡y fi·,‡fiY -fi€yH“ fl‡””€-Â €y,y,fi“ l
 „,->fi“€”>ÎÂ ‘fi”fi‡fi‡fi< :‡-Âfi“->yô yëy ‡-ô‡„Ë>yü Hflfi,‡’ l ô,,-fi“ “-€”,“y” ,‡-“ “
 ‡-ô<‡’ %‰-/yÁ/y fl‡fiyô””>ÎÂ fl‡-Âfi”fi“ N

1. $i^{-1}z^{\infty} \approx \mathfrak{e} \leq \Delta \mu \oplus i^a \vee \ll \infty \sqcap$

1.1. ≤ ·fiñ,“,·,“yŷ · >-·fiñÊÿçy √·€fi“yÔçy ‘fi’fi“fi‡ ·,‡-Âfi“->yÔ ◊-/œÓÁ> fiñ ø‡fi”‡-<<’ N+ >-
·€„Á-ÿ ‡’-€y◊-Êyŷ ‡y/- “fi◊ y‡fi“>yÔ ‡-·Âfi“fi” y◊M◊- fi,<ŷl fiñ‘◊/y fiñ ·€„,Óÿç
fi‡yÁy>-< l

1.1.1. $\lambda \vee \hat{A} \hat{n} \vdash \ddot{y} \circ \div \ddot{y} \circ \ddot{y} \in \geq \cdot \langle \ddot{t}, \ddot{t} \rangle \quad \Sigma - \cdot, \ddot{t} - \hat{A} \hat{n} \vdash - \gg \hat{n} \hat{n} \quad \in \ddot{y} \hat{E} - 0 \cdot \langle \ddot{t}, \ddot{t} \rangle \quad - \in \ddot{y} \circ \hat{n} \hat{n} \hat{t} \hat{n} \cdot, \cdot \gg \ddot{y} - \quad \Sigma - \cdot, \ddot{t} - \hat{A} \hat{n} \vdash - \gg \hat{n} \hat{n}$
 $\in \ddot{y} \hat{E} - \hat{0} \cdot \langle \hat{n} \hat{t}, \hat{t} \hat{n} \rangle \quad \hat{0} \cdot \ddot{Y} \cdot, \ddot{y} \hat{O} \quad \hat{0} \cdot \hat{n} \hat{n} \hat{n} \hat{t} - \hat{0} \cdot, \ddot{t} - \hat{A} \hat{n} \vdash - \gg \hat{O} \quad @$

[illegible]

1.1.3. À>fi-flÿ,-€ÿð-ÊÿÖ ≥ fi,:fif' ð--fi€"-->y' 0-fi,fifÔ>y' Σ-,f-Âfi"-->fifi €ÿÊ- ÿ€ÿ "fi -€ÿð/fifi
fifi':,">ÿ/- l ·fid'-“Ê” „fifið„ ‘Ê ÷ÿð,y y fifi“€/Ê” l·,f»,Ó ”fi-flÿ,-€ÿð-ÊÿÖl

·fi·fiÔ“Ëÿ·Ô ÿ ÿ'ÔËÿ ¿·fi >- ‘-,,, >-Á-€-flfi'Ô'ÿ ·fi”‘‡’ >>fi€',>”fi Σ-·,‡-Âfi“->>fi”fi
 €ÿÊ-[

1.1.4. À-†-“<- Σ-·,†-Âñ“->>ñ”ñ €ÿÊ-€ ≥ ,†-“<Î | flñ€„Á>>Î’ Σ-·,†-Âñ“->>Î< €ÿÊñ< “ fl’†ÿñ’ ‘ỵ̈,’ÿÔ
‘ñ”ññ†- ,†-Âñ“->ÿÔ “ †’ð„€Î,-’ >’Á->,ñ”ñ ·€„Á-Ô ÿ fl†’flÔ,·,“„ÔËÿ ’ ·ñ”†Ë>ÿÔ
fl†’flñ€-”-’<ñÿ @flñ’ð’ÿ [

[illegible]

1.1.6. $\lambda f - \# - \lambda, \ddot{y} \in \geq \text{fi}, \# \text{fi}' \quad \diamond - \text{fi} \epsilon' - \lambda \ddot{y}' \quad 0 \cdot \text{fi}, \text{fi} \hat{O} \ddot{y}' \quad \Sigma - \lambda, \# - \hat{\text{A}} \text{fi}' - \lambda \text{fi}' \text{fi} \quad \epsilon \ddot{y} \hat{E} - \lambda, \# - \text{„} \hat{O} \hat{E} \text{”} \quad \lambda - \hat{\text{A}} \text{fi} \div \lambda \ddot{y} \quad \hat{O} \lambda -$
 $\lambda - \# - \lambda, \ddot{y}' \quad \text{fi} \cdot \text{fi}, \text{fi} \hat{O} \text{”} \cdot \hat{O} \quad \text{fi} \ddot{y} \ddot{y}' \hat{O} \hat{E} \text{”} \quad \text{fi}', \text{fi} \quad \diamond - \text{fi}' - \text{„} \lambda - \hat{\text{A}} - \epsilon - \text{fi} \text{fi} \diamond \lambda \ddot{y} \quad \Sigma - \lambda, \# - \hat{\text{A}} \text{fi}' - \lambda \text{fi}' \text{fi} \quad \epsilon \ddot{y} \hat{E} - \lambda$

1.1.7. À¡,“→ñí †-◊-ÿ†-,‘Ēī,“ñ € ≥ „Á-,ÿ Σ-.,†-Âñ“-»ñ”ñ ĄŸÊ- “ .,”→ñ< †-◊-ÿ†-,‘Ēī,“
H.,“→ñ< ◊-.-“→ÿÿ | “ fl†ÿñí ·ñ“†Ē,ÿÏ flñ◊’ÿ | ñññ†ñ< Σ-.,†-Âñ“-»ñ”ñ ĄŸÊñ [ÿĄŸ ”ñ
„flñ€ñññÁ>>ÿ fl†,-“ÿ,‘Ēī | > -Î€ñ ,““ñ€>ñ >-‘÷-Èÿ< ñ-†-◊ñ /ññl’,>,Îÿ
ñ†”->-ÿ @·ñññ,“,;“ÿ @·◊-ñññ-,‘Ēī,“ñ< @f @->-,, @◊-ÆÓÁ,ÿÏ @ññ”ññ†- @,†-Âñ“-»ÿÏ @

[illegible][illegible][illegible]

1.1.11. **ÀvÈʔ- ỵ„Èː, „** € ≥ ɔ>-Áỵ, €Í>ŋ' flŋʔ÷ːỵ' H-ŋ€" 60%) ỵ€ỵ "ỵ-'€Í ỵ„Èː, - ʔŋŋ' , ʔ->flŋʔ,ŋ"ŋ ʔʔː, - l flʔỵ>-€÷-È"ŋ Σ->, ʔ-Âŋ"->>ŋ„, €ỵÊ„ l flʔŋỵɔŋÈ"Ëỵ' " flʔỵŋ' "ÿ, "ỵÔ "ŋ"ŋŋʔ- , ʔ-Âŋ"->ỵÔ " ʔʔ„€Í,-,' flŋ÷-ʔ-l ,ỵÁỵ>ŋ"ŋ -ː, "ỵÔ l flʔŋ, Á/ l .Ôɔ->ÎÂ . -" -ʔỵÔÿ " "ŋ"flʔŋ"ŋ"ÎÂ l /->-€ỵÔ-Ëỵŋ>ÎÂ l ŋ,ŋflŋỵ, €Í>ÎÂ .ỵ, <-Â l - , -÷' flʔỵÁỵ>ỵÔ „Èʔ- - ỵ„Èː, „ ʔŋŋ' , ʔ->flŋʔ,ŋ"ŋ ʔʔː, - l Σ->, ʔ-Âŋ"->>ŋ"ŋ €ỵÊ- " ʔʔ„€Í,-,' flʔŋ,ỵ"flʔŋ" ->ÎÂ ʔÿ, "ỵÿ ʔʔ, ÎỵÂ ʔ€ỵÊ[

- [illegible]

