



**Eximia Journal**  
**(ISSN 2784-0735)**

**Vol. 13**  

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**2024**

## New General Theory of Magnitudes

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**Abstract.** This paper shows a new way to get the distance between any 2 stars shown on a photograph of the night sky of the stars anywhere at all . Each star is shown as Inverse Apparent Magnitudes.

**Keywords.** Theory of magnitudes

This paper shows a new way to get the distance between any 2 stars shown on a photograph of the night sky of the stars anywhere at all . Each star is shown as Inverse Apparent Magnitudes.

These new equations for the New General Theory of Magnitudes : 2.5 times the smaller star's inverse apparent magnitude . =s B the new Q is square root of LN 24 pi 2 + total stars in that 1 sector inverse apparent magnitude.  $B + Q = R'$  ; minus  $B - Q = R$  then both  $R' = R + R' - R = T$  then eulers number exp raised to T divided by T. this is P times  $T = N$  ; N divided by B = C C + P divided by 2 =  $R' + R + R' - R + B = Z$  then Z divided by LN Z - 1 times Star's 1 inverse apparent magnitude times other equals approximately dis between 2 stars on a stars photograph of the night sky .u

Here is another appendix on the mathematics of D- field tensors ;  $T_i V_i = V \epsilon_a = V_a E_a$  ;  $T_{ij} V_i (V(E_i)) : T_k = T - I x_i/x_k ; T_{i1} i2/j1/j2 = V(E_i)I = (U_i/i_i)$

$T_i U_{ir} = V_j = T_i V_{iji} . T_i/ir T_k = Tr, (Tr, (V/ir))$

There is a few constants such as 8 pi . square root of 2 pi ; and 2 pi ; The term square root of 2 pi is

2.5 which is represented Z ; also A =s Inverse apparent magnitude 1 ; also B =s the other star inverse

apparent magnitude 2 .

$Q = \text{Square root of LN } (24\pi)^2 + \text{Mag } n+1) =s$

; Eulers number (constant exponent) raised to Y divided by 2 pi all this equals Q

$(S)Q \text{ squared} - Q \text{ squared} = N$  Then  $LN S + Q \text{ squared} = T'$  Then  $LN S - Q \text{ squared}$

+ T

$T' + T = P$  N divided by P - P equals distance between 2 stars .

Appendix Around 2 stars there is sectors distance around 2 stars to get the value Q

it  $A + B$  divided by  $A + B - A - B$  all of this times pi .

In sector count number of stars and there inverse  
apparent magnitudes in those 2 sectors around stars and multiply that times 8 pi and  
add one and do process of the former to get Q

Also in appendix a few new derivatives ;  $nX^{n-1}$  exponent  $n-1$  ,  $N > X N$  squared – N  
(nix) = derivative another is a plus B times smaller number – smaller number squared

$(Q1 + Q2) - (Q1 - Q2)$  times 2.5 divided by  $(Q1 + Q2) + (Q1 - Q2)$  times 8 pi take  
the square root of that by which was divided. take the natural logarithm of that and you get the  
value P take P squared and then divide P by 2 . call all of this formul W

My second equation ; Euler's number raised to its exponent is such ; total addition of  
the inverse apparent magnitudes in a centimeter using times that in centimeter plus one times  
8 pi take natural logarithm of that total using square root of total al of this divided by 3 pi

### **References**

- [1] Martin Ince : (1997) ; Dictionary of Astronomy : 128 ; Peter Collin Publishing Ltd
- [2] Previous paper The Theory of Magnitudes Published paper in Technium Vol.4, No.pp.  
11-14 (2022) ISSN: 2668-778X [www.techniumscience.com](http://www.techniumscience.com)