

Injushwe: Nhlantla Mbanabo
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Ukuzisa uFunda Kabanzi ngalolu
uchunngochungu kanye nezihleko
ezithulwe kulencwajana sicela
lwekeshule ku-
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*Bhaka iTUMIP yezi-2 3

Ngamemho siyabona uku thi ezinye
zezintlo zomkhathathi ziqhatake ukudlula
ezinye. Ingabe ziseduzza nathi, ingakho
nje ziqhatake kaikhulu? Norma ingobe
zikhathala impekumpeku emingqi?

Oqayinyanga bayakwazi ukukhala
ibanga eliphakathi kwezintlo zomkhathathi,
ngakho ke bayakwazi ukucishelela
ubungako bemppekumpeku lezi izintlo
eziyikhathala kwisokhanya.

Ngokubenzisa izihlonga thizeni laplo
besebenza kwimpukumandla bakwazi
nokulinganisa impekumpeku yensokhanya,
ekhatulwa uhooyamppeku(umthanjeya,
impya kanye nekhathanzuba), uhooyamppeku
(umshya, imvundla) kanye nokuswebuza.

Ezinye zezintlo ezikhathala kwimpeku-
mandla, ezifana nesidangazeli, izinkanyezi
ezintlunga, iziphinqi, noma izingqang-
qashya zikhathala impekumpeku enkulu.
Zikhathala impekumpeku ephindwe
sancinqi mayiqhathamiswa naleyo
yelanga.

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ukumhuluzeka
emoyeni womhlaba

Isehlakalo
iGW170817
ibonwa izipopolo
iChandra
kwiqabugala.

Umdwebho
okhombisa
izingwiwinqa ezimbili
zimhuluzana

Izidangazelekazi
iZOT1Of-d
iSimomnet 2016

Izinkanyezi ezi-5 ezikhanya
kakhulu kwisikhomo
iCaselopes zihlambandla
aphindwe eSheer-1 OOO
kumaLangalethu
kodwa lokhu sikusiko neze
ubumppekumpeku!

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ubumppekumpeku!

Iningi lezintlo ezikhathala kwimpukumandla
azibonakali ngamemho. 2

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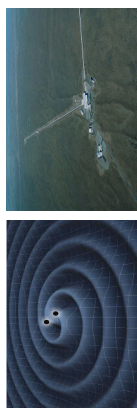
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ImiDwizo

Imidwizo ingenye yezintlo
ezimpekumpeku ezihambisana newigo
eyaziwayo kumkhathilibe. Impekumpeku
ekhatulwa isahoyamppeku* ingadlula
ngisho leyo yesidangazelekazi. Yize
yakhushulwa eminyakeni engama-50
eye-dlule, indlela esebenza ngayo
kayikaqondiswe kahle
Imidwizo ingaba mafuphi (kusukela
kumzulaka kuze kuyonfinyelele
kemizwini emibalwa) noma ibe
bulambalala (kusukela kwimzuzu
emibalwa kuyonfinyelela kumahora). Lena
elula emafuphi yona ihambisana
nokutholana phrezulu kwezintunge noma
kwentunge kanye nesigwinqa.
Sizipopolo ezizungeza umhlaba zihlonga
cishe umdwizo owodwa ngosuku.

*Bhaka iTUMIP yezi-2



Kwisixelele: Isifanisekisi sikhombisa iziGwinqa
ezimbili zimhuluzana. Amakapaza asabalalise
okwamaqagasi esizibeni amele amadlambi
omkhathathi.

Amadlambi okuqala ukuthi ahlungwe abantu
mihla ziyi-14 kuMandulo 2015 asifundisa
ngalolu uhlobo lokumhuluzana, olwenzeka
eminyakeni eyizigidi eziyi-1.3 eyedlule phakathi
kwamaqhela eziGwinqa ezinezisindo
ezilinganiselwe kuma-30 kanye nama-20 uma
ziqhathanyiswa neLangalethu. Amandla
akhujizeka kulokhu kuruhuluzana afriyela
kulawo akhiqizwa ukukhanya kwazo zonke
izinkanyezi kuMkhathilibe.

Kwesokudla: Isithombe esikhombisa iligo
eHanford, esinye sezihlongamadlambi.
Amadlambi ahlungwayo afana ntee
nalawo abhulwa iGeneral Relativity
eyaqhamuka no-Albert Einstein.

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Kwisixelele: Izipopolo iFermi
Gamma-ray Space Telescope,
ehlorzaimisebe
yamahlithanzuba,
okuyintyotzi empekumpeku
enamandla aphindeke izigidi kwimtyonzi
yokukhanya.

Mhla ziyi-17 kuNowaba 2017, izipopolo iFermi
zahlunga imdwizo, emva kwemizuzwana e-
1.7 kukade kuhlungwe kokugebezela
komkhathilibe. Zombili lezi zehlakalo zazivela
endaweni yesigamreko eyodwa, okuyilapho
kwakutholana phrezulu kwezintunge,
ezazisebudeni obulinganiselwe kwizigidi eziyi-
130 naseemhlabeni. Emva kwesikhathi, lesi
sehlakalo sabonwa kwiqabugala, kumathanjeya,
kanye neminye imizwayo yokuhlunga.

Kwesokudla: Tumdwizo
owabonwa izipopolo
iFermi useborya
izipopolo iChandra
kwiqabugala, emva
kweinsuku eziyisi-9.

IziGwinqi

Uma inkanyezi enesisindo
esingaphezulu kwaleso seLangale
idlangazaleka (iqhuma), idala isiGwinqi
esinesisindo esingaphezulu kwe
santalanga ambalwa endeni yaso,
endaweni enobubanzi obungama
khilomitha ambalwa.
Kungani kuyigama elingajwayekile na?
Ingoba isiGwinqi sinominyondo
onamandla ngalendlela yokuthi ayikho
intlo ekwazi ukuphuryuka kusona. Hhayi
ukukhanya, futshi hhayi uhayanel
Sizibona kanjani pho? Ngokuthorya
kwazo lokho okusondelene nakholo
Uminyondompeku wazo unamandla ne
ngoba isindo sazo sibanganyelwe
endaweni encane. Le mpekumpeku
ingakhawibhisha njenge mnyondoza.
Imnyondoza yahlungwa okokuqala ngqo
kuMhlandulo woryaka ka-2015.
Yakhiqizwa ukumhuluzana kweziGwinqa
ezimbili.

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