Islam at the Crossroads Reflections on the History and Historiography of Astronomical Transmission

150

Duodecimus

Inquef enf, biffantia centri epicycli a centrò equantis:cum qua vt in quinto calu procede. Dabes igitur centri equationes ad femicirculos abfolutas. Ar gumento:ŭ %o equationes in mercurio ficut in reliquis elaborabis. Abinu/ ta quog propostionalia ficut alibi. Derum equationes argumento:ŭ : quas in tabula feribi conuenti:fiant ac fi centrŭ epicycli fit in medioeri eius a cen/ tro mundi biffanti a: bum fegab auge equantis per.60.fere gradus biffat. Dec be angulis biuerfitatum becuter perfiringere libuit.

> Explicit Liber Andecimus Epitomatis. Sequitur Buodecimus.

Liber Duodecimus Speculationes Ampliozes & Circa Baf, fionem planetarum vinerfam: Dogreffum videlicet Statio, nem: z Regreffum. Tariationes nonnullas in longitudinem motus epicyclozúg ratia accidentes lucidiffime vifeernit.

Propositio Prima.

I planetis altiozibus vnică po fueris oiucrfitatem:epicyclus in concentrico : aut ecentricus fine epicyclo eidem fufficiens

erit occafio. (Diuerfitati que foli colligata eft in tellige. Donamus itaq3 q motus epi cycli in concentrico: a motus planete in epicyclo collecti equent medio motui foliesquemadmodi fuperius oftéfa pofulant. Ecentrici vo centrú moueatur ad fucceflioné fignosú eque velociter cum fole: a planeta ipfe fimili-

ter ea velocitate procedat: qua epicyelus in concentrico. Étus quidem medium locum beterminet linea a centro mundi bucta equidiffanter linee excunti a centro ecentrici per centrum planete. (Sitigit circulus mundo concentricus.a.b.g.fuper centro. 3... fit più etus.a.in quo fuit centri epicycli:bum planeta fuit in auge epicycli:fc3 puneto.b.büq5 fol medio curfu coniunctus fuit planete: puncto.b.bfut centri ecentrici. Tunc vo epicyclus fit fuper puncto.b.r. planeta in epicyclo fuper puncto.o. Ductis igitur lineis, 5.b.d.b.o.n.o.5.o.et.5.s.erit angulus.a.5.b. motus medij: z angulus.d.b.o. biuerfitatis fiue motus medij argumeti. Sit aŭt angulus.a.5.s.medij motus folis, binc in linea.5.s.erit centrum centri cici:quod fit.n. Donamus itaq5 psimo concentricum z ecentricum equeles: et proportionem femidiametri corterici ad suffantiam centroum. Erit igitar linea.5.b.fut.5.n.equalis.b.o. Cum aŭ vuo angulia.5.b.et.d.b.o.equanf angulo.a.5.s.fublato comuni.a.5.erit angulus.d.5.s.ecquanf angulos.a.5.s.fublato comuni.a.5.erit angulus.d.5.e.ecquanf angulos.a.5.s.fublato comuni.a.5.erit angulus.d.5.e.ecquanf angulos.a.5.s.fublato comuni.a.5.erit angulus.d.5.e.ecquanf angulos.a.5.s.fublato comuni.a.5.erit angulus.d.5.s.ecqlis angulo.d.b.o. quare5.b.et.m.o.equales z fibi equidifiant.Et quia funct cuales : erunt vue linee.5.bu linee.5.n.et.b.o.equidifiantes.ynde fuper centro.n.beferipto cirخط معدادنا طط سه ك تماذا كل مركز الكوكب عالى بط از 2 كركة الحاوم كرك الن فرا و مط عركان خط م قدمه (د) طط و سه واذ ا وصل سه ا كان ما و ا موادنا يلط دم ليواز م خليم قد سه و و م و مما ما لوخ و لا ف سه كان ما و باط م و باط ه ما لوخ و مواد ما ا م كل منا م من و محل ما فنقط قد مركز الكوكب عاصلا كار ت منطبق عانقط ك مركز الكوكر على اصل التدويد فلافق بينا اصل فرف من الاحوال و ذكر ما ارد نا بيا فد

دسادة كستواج معاديرا لزدائ من معاديرالاصلوع فاللكة العبرالعابد الذائيا الحاجرين فسالروا برالعطام لوليال منجل لا

Premodern Islamic societies stood at a crossroads both in time and in space, temporally between the ancient world and the modern, and spatially in the midst of the civilizations of the *oecumene*. Recent studies have discovered any number of interesting cases of scientific transmission to and from Islam, which accentuate its critical role in both scientific transmission and transformation over more than a millennium. But another line of argument has played down this role, based on either cultural specificity or else on assumptions of parallel (but independent) development. This talk will explore these alternatives and argue that in fact intercultural scientific transmission, both in the Islamic case and in others, should be seen as more the norm rather than the exception.







F. Jamil Ragep, Canada Research Chair in the History of Science in Islamic Societies, Director of the Institute of Islamic Studies at McGill University, Montreal, Canada

University of Notre Dame Wednesday, June 12, 2013, 7:00 pm Digital Visualization Theater, Jordan Hall of Science Part of the Eleventh Biennial History of Astronomy Workshop www.nd.edu/~histast/