SWINBURNE TIME ALLOCATION COMMITTEE FOR KECK (STACK) POLICY AND PROCEDURES

SCOPE

This document defines the terms of reference, policy guidelines, procedures and operational details for our internal TAC – the Swinburne Time Allocation Committee for Keck, or STACK – that is responsible for allocating Swinburne time on the Keck telescopes. The chair of the Swinburne Advisory Committee for Keck (SACK) is responsible for updating this document. To be read in conjunction with the APPLICATION POLICY GUIDELINES & PROCEDURES.

PRIMARY ROLE

The Vice Chancellor has invested in Keck time for CAS astronomers with the specific aim of achieving greater research output for Swinburne, particularly high-impact papers in *Nature* and *Science*. The STACK is not distributing time on a National Facility. The deliberations and decisions of the STACK must focus on maximizing the scientific return for Swinburne.

MEMBERSHIP

The STACK should comprise the following.

Voting members to read and rank proposals and attend the STACK meeting:

- · The Chair, who will be appointed externally for a 5-semester term;
- · 5 Level C/D/E CAS staff members with a 3-semester term;
- · 1 level A/B CAS staff member with a 2-semester term;

Non-voting members to read and rank proposals:

- · 4 Level C/D/E CAS staff members with a 4-semester term;
- · 1 level A/B CAS staff member with a 2-semester term.

A CAS PhD Student will be a non-voting member whose role is to read proposals and attend the STACK meeting as an observer with a 2-semester term. The student will receive the proposals at the same time as other members and is welcome to contribute to the discussion but will not vote.

The STACK will also have a non-voting Technical Secretary (TS) with experience in observational optical astronomy. The role of the TS is to liaise and Keck on all aspects of the telescopes, available instruments

and proposal/scheduling process. The TS will also administer the internal Swinburne proposal process, including the STACK meeting and its outcomes. The STACK will also have a non-voting Technical Assessor (TA) with experience in observational optical astronomy. The TA will provide written technical reports prior to the STACK meeting and will be on-hand to provide technical information on the telescopes and instruments during the STACK meeting.

The SACK chair is responsible for STACK member and reader appointments and will ensure that members are staggered to provide continuity and retention of 'memory'. The latter point may require an amendment to a member's tenure. The external STACK chair will be selected by the SACK in consultation with the CAS Director. STACK members must notify the SACK chair well in advance (preferably before their proposed final STACK meeting) if they wish to shorten their STACK tenure. STACK members must notify the SACK chair well in advance if they are unable to attend the meeting. The SACK chair will find a suitable person to replace the absent person for that meeting. The student representative will be chosen by a transparent student vote organized by the Centre student representative. Students must consult their supervisor(s) before nominating themselves (or being nominated) for the vote. The CAS Director must confirm all appointments.

PROPOSAL ASSESSMENT

All proposals and evaluations are confidential. There should be no discussion of the proposals with any members outside the STACK. If there are issues concerning specific proposals, please consult the STACK Chair or SACK Chair. The STACK will not consider technical, editorial or any minor changes to a proposal made after the submission deadline. If important additional information emerges about a proposal after the submission deadline, the PI must have submitted it to the TS in writing before the STACK meeting. No information from any other party, including STACK members, may be considered when pre-grading the proposal. The TS will consult with the STACK Chair and the CAS Director about the relevance of any additional information provided by a PI and whether it should be considered when discussing and re-grading the proposal at the STACK meeting. Depending on the Chair and Director's decision, the TS may circulate the additional information, in writing, to all STACK members before the STACK meeting. If a PI requests to withdraw their proposal from consideration, such a request must be in writing to the TS.

PUBLICATION RECORD

The TS, SACK Chair and CAS Director will meet no later than 1 month before the CfP to discuss publication records and eligibility. The CAS Director will give clear instructions to the STACK if any proposal is to have reduced ranking due to publication issues. It is beyond the STACK to consider publication history in their rankings and will only consider the Director's recommendation.

RANKING OF PROPOSALS

The proposals will be ranked on how well they maximize the scientific outcomes for Swinburne, while also taking into account the technical feasibility of the proposal provided by the TA in the final ranking.

Successful proposals are expected to result in Swinburne-led publications. Ideally this would mean a Swinburne first author, but it is recognised that a case can be made for Swinburne leadership with other author priorities. This case should be presented to the STACK and will be taken into consideration. Proposals should clearly identify the leadership plan for publication(s).

The STACK will follow a similar process to other TACs. The ranking scheme for the given semester will be outlined and sent to the STACK voting members and readers along with the submitted proposals, immediately after the proposal deadline. Initially, STACK voting members and readers will read and rank each proposal. The voting members and readers will complete a written pro-forma anonymously (see STACK_form.doc) that will be submitted along with their pre-grades to the TS by a date prior to the STACK meeting as set by the TS. All STACK voting members and readers must attempt to assess all proposals with the same level of detail. The ranks and comments of individual STACK voting members and readers will be treated as strictly confidential before, during and after the STACK meeting.

Two days prior to the STACK meeting, the TS will assign each proposal to a single STACK voting member who will lead its discussion during the meeting. The voting member and reader comments (see STACK_form.doc) will be made available to non-conflicted STACK voting members 2 days prior to the STACK meeting to inform the discussion and final ranking. The discussion leader will, among other things, (1) review the proposal and the proposed science, (2) discuss the potential scientific outcomes to Swinburne, (3) present a summary of the feedback.

At the meeting, the STACK will discuss the proposals in the order in which they were submitted. Proposal discussion times typically take 20-30min, however there is no limit on discussion times per proposal.

STACK members can alter their initial proposal rankings during the meeting. STACK members (including the student member) will take no part in the ranking or discussion of proposals on which they are an investigator, absenting themselves from the meeting when their proposal is being considered/discussed. STACK members may declare a conflict of interest in grading and discussion of any proposal and absent themselves accordingly.

After all proposal discussions are completed, STACK members will submit their final rankings to the TS, who will compile the final rankings and reveal the final scores for all proposals.

The scores will determine the proposal rankings for time allocation on each telescope and lunation range. Ties between proposals will be broken by a STACK member vote. The STACK Chair will have the casting vote; that is, if there is a tied vote, the proposal for which the Chair voted will be ranked higher.

The ultimate outcome of the STACK meeting must be a recommended allocation of the available telescope time to particular proposals. The final proposal scores will be the main guide toward awarding time. However, if there is any justification for a variance from the PI's requested minimum time and any other aspect of flexibility in the proposed allocation (e.g. with respect to instrument, lunation etc.), this should be discussed during the meeting and at the time of telescope allocation. At all times, the primary role of the STACK should be carefully considered: for example, several proposals may have very similar scores, however allocating time strictly in order or formal proposal ranking may not maximize the scientific outcomes for Swinburne. If there are not enough proposals that are deemed of sufficient quality and/or do not deliver a sufficient level of scientific outcome or impact for SUT, and there remains unallocated time, the STACK Chair will raise this with the CAS Director and SACK Chair.

ToO PROPOSALS:

Swinburne can allocate up to 2 triggers for Partnership ToO observations per semester, where the duration of each trigger shall not exceed one hour. ToO proposals will be ranked against other non-ToO proposals within that round. The STACK will assess the relative ranking with the other proposals, accounting for the factor of 2x hourly rate charge for ToO observations. ToO proposals can be allocated time if the final proposal scores are at least on par or above the line set by the regular proposals.

CONFLICT OF INTEREST

The TS will assign the primary assessor to be as non-conflicted as possible, avoiding assignments that request the same instrument/lunation/telescope on a best effort basis. All STACK members must declare any actual, potential or perceived conflicts of interest prior to the review process. STACK members will be recused from any proposals where an actual conflict of interest exists, or where they feel unable to render an impartial assessment. For potential or perceived conflicts of interest where the STACK member feels they can render an impartial assessment, the disclosure will be recorded and the STACK member can assess the proposal. Close collaborators, past students/PhD supervisors are not necessarily considered a conflict of interest. The STACK, particularly the Chair, should be diligent during this phase of the STACK meeting to ensure that the STACK's primary role is achieved. The Chair will begin the meeting with a discussion of possible conflicts and the Chair has the final say as to if the panel member is considered conflicted or not.

QUORUM

The minimum number of non-conflicted STACK members required to reasonably assess a proposal and rank it against others is four (4). If, at the proposal deadline, it becomes clear that this quorum will not be met for one or more proposals, then the CAS Director and the external STACK Chair should together select an additional number of STACK voting members from the STACK readers to produce a quorum for

that semester. All STACK members, including the additional ones, will have equal rights and responsibilities to rank and discuss every proposal for that semester.

STACK RECOMMENDATIONS

The recommendations made by the STACK on the allocation of time will be final. Only the CAS Director, in consultation with the STACK Chair, may alter the recommendations (see below) prior to the forwarding of proposals to Keck. Notwithstanding this, it must be realized that the STACK outcomes are subject to scheduling by the Keck Observatory. As described above, efforts will be made to resolve such conflicts. However, the TS will inform the STACK members if Keck cannot schedule a proposal after efforts (discussed above) have been made to resolve the conflict(s). The STACK will allocate the available telescope time to the next best proposal that can be scheduled.

ROLE OF CAS DIRECTOR

Prior to the Call for Proposals, the SACK Chair and TS will inform the CAS Director of any restrictions on the number and distribution (telescope, lunation, instrument etc.) of Keck nights in the upcoming semester. The CAS Director should indicate if they wish to place any further restriction on the number or distribution, after which the TS would issue the Call for Proposal. The Director should also decide on eligibility (e.g., in cases where fix-term contracts are near ending or if publication outputs are low). Eligibility should be decided between the EoI and proposal deadline (pending late applications).

Immediately after the proposal submission deadline, the TS will supply all proposals to the STACK and the CAS Director. At this time, the Director and SACK chair will discuss possible trading of nights, depending on the lunation demand set by the submitted proposals. Shortly before the STACK meeting, the CAS Director, having read all proposals in detail, will meet with the STACK Chair with the aim of ensuring the Chair is well briefed on the primary role of the STACK.

The recommended time allocation from the STACK, and any special instructions with regard to scheduling, will be submitted by the TS to the CAS Director for approval after the STACK meeting. If any adjustments to the STACK recommendations are to be made, including requests to change to the distribution of nights across telescope or lunation, the CAS Director must consult with the STACK Chair. Any modification that leads to the allocation of time on a proposal on which the Director is PI or Co-I will be deferred to the SACK chair or representative. The CAS Director will take into consideration the balance within CAS between postdoc-led and staff-led proposals as well as encouraging the distribution of resources among CAS research groups. The CAS Director (or appointee) has final responsibility for, and must approve, the final allocations before they are forwarded to Keck.

FEEDBACK

The primary reader will distill the STACK comments to provide feedback on proposals, but this will be limited to a brief summary relating to their clarity, scientific merit and, on a best effort basis, their feasibility. The feedback will be reviewed by the STACK Chair. Feedback will be made available as soon as possible to PIs after the final recommended allocations have been sent to Keck and proposal outcomes have been made available to all applicants. The TS will also notify the readers of the proposals awarded time after the final allocations are approved.

ABBREVIATIONS

CAS: Centre for Astrophysics and Supercomputing

CFP: Call for proposals

Col: Co-investigator

PI: Principal Investigator

SACK: Swinburne Advisory Committee for Keck

STACK: Swinburne TAC for Keck

SUT: Swinburne University of Technology

TAC: Time assignment committee

TS: Technical Secretary

TA: Technical Assessor